

JUL 13 1946

EXPER. STATION

# AMERICAN NURSERYMAN

*The Nurseryman's Forte: To Make America More Beautiful and Fruitful*



JULY 15, 1946

A. A. N. Convention Number

# **Leaders** for **1947**

## **Gardeners large and small are buying these Specialties**

You can increase your sales volume by featuring these specialties. Sales of such popular leaders bring also sales of other nursery items.

**Andrews Specialties will again be  
Best Sellers in the Spring of '47**

**Red Raspberries - Red Lake Currant - Red Rhubarb**

### **Indian Summer (Below) the New Everbearing Red Raspberry**

The best everbearing red now on the market. As much fruit from the summer crop as from ordinary raspberries and a fall crop too. Large, high quality fruit—sturdy, disease resistant canes. Don't omit this sure fire hit from your list this year.



Indian Summer

### **Red Lake Currant →**

The new Red Lake is considered the best red Currant on the market. Big berries borne in long bunches—bushes thrifty, very productive—long stems make fruit easy to pick. Your trade will be more satisfied with the Red Lake Currant.



Red Lake Currant

## **ANDREWS RED RASPBERRIES**

### **CHIEF**

Early — Hardy — Good Quality

### **LATHAM**

Popular — Medium Season

### **INDIAN SUMMER**

High Quality — Disease Resistant  
Two Crops a Year

### **SUNRISE**

Extra Early — Extra Quality

## **ANDREWS RED RHUBARB**

### **MacDONALD**

Red — Strong Grower — Tender

### **CANADA RED**

Red Stalk Clear Through — New



MacDonald Red Rhubarb  
Large Crisp Tender Stalks  
Four Months After Planting

### **HANSEN'S BUSH CHERRY**

# **ANDREWS NURSERY**

**FARIBAULT**

**MINNESOTA**



# AMERICAN NURSERYMAN

[Registered U. S. Patent Office]

*The Nurseryman's Forte: To Make America More Beautiful and Fruitful*

VOL. LXXXIV, No. 2

JULY 15, 1946

Founded 1904  
With which was merged 1939  
**THE NATIONAL NURSERYMAN**  
Established 1893

\* \* \* \* \*

Published on the  
first and fifteenth  
of each month by the  
**AMERICAN NURSERYMAN  
PUBLISHING COMPANY**

343 South Dearborn Street,  
Chicago 4, Illinois.  
Telephone: Wabash 8194

\* \* \* \* \*

Subscription Price:  
\$2.00 per year; outside  
United States, \$2.50;  
Single Copies, 10c.

\* \* \* \* \*

Advertising Rates  
on application.  
Forms close ten days  
before date of issue.

\* \* \* \* \*

Entered as second-class matter  
December 14, 1933, at Chicago,  
Ill., under act of March 3, 1879.

## CONTENTS

First Postwar A. A. N. Convention.....	7
Program for A. A. A. Convention at Miami Beach.....	8
Sixty-second President Presents Message.....	9
By A. H. Hill	
Secretary Pictures Capital Today.....	11
By R. P. White	
National Mail Order Association Meets.....	13
New Things in Plant Science.....	14
By H. B. Tukey	
Developing Sales and Display Grounds.....	15
By Harold E. Hunziker	
Modern Cold-storage Building.....	22
Plant Notes Here and There.....	32
By C. W. Wood	
Oregon Meeting at State College.....	62
By Julia Hausch, Secretary	
Editorial.....	6
—Victory Convention.....	6
—Our Largest Issue.....	6
—Sellers' Market at End?.....	6
—New Firms Increase.....	6
Spring in Tennessee.....	24
New Devices and Equipment.....	26
—Hole Digger.....	26
—Disappearing Sprinkler.....	26
—Tillex "31".....	26
—Tin Can Cutter.....	26
—Weed Burner Models.....	28
—Electric Weed Control.....	28
—All-purpose Cart.....	28
—New Power Mower.....	28
—New Chemical Controls.....	28
—Azalea Petal Blight.....	28
—Fell Trees with Shears.....	30
—Safe Steps for Trucks.....	30
Approved Training.....	38
Reorganize Ozarks Firm.....	38
On and Off the Nursery.....	42
—Comments on Some.....	42
Uncommon Shrubs.....	42
Fruit Variety Survey.....	44
Coming Events.....	46
—Meeting Calendar.....	46
—Nut Growers Set Dates.....	46
—Maryland Plans.....	46
—Ohio Summer Meeting.....	46
—Virginia Plans.....	46
—Michigan Short Course.....	46
Monument Nursery.....	47
New Books and Bulletins.....	48
—Appraisal of Burbank.....	48
—Book on Geraniums.....	48
—Hardy Chrysanthemums.....	48
—Methyl Bromide Data.....	48
—Carbon Disulphide.....	49
—Bulletins Received.....	50
Oklahoma Short Course.....	55
Long Island Meeting.....	58
St. Louis Meeting.....	58
Obituary.....	58
—Carl Cropp, Sr.....	58
Competition for Designs of.....	58
Small Home Grounds.....	58
At Boston Show.....	59
Soil Conservation Districts.....	59
Fruitfulness in Taxus.....	60
New Plant Patents.....	61
Central California Association.....	65
Meeting.....	65
California Notes.....	67
Raise Freight Rates.....	68
Ask Express Rate Raise.....	69
DDT for Codling Moth.....	72
Nebraska Rose Garden.....	75
F. D. Jones Honored.....	76
Inspect Peach Breeding at.....	78
Fort Valley, Ga.....	78
Spraying with 2, 4-D.....	79
Illinois Directors Meet.....	80
Notes from a Nurseryman's.....	82
Wife.....	82
Double Action Plow.....	85
Soap Spreaders.....	86
Indiana State Nurseries.....	88
Fell City Landmark.....	89

# INDEX TO ADVERTISERS

Agicide Laboratories, Inc.	87	Eagle Wrapping Products Co.	74	Nagle's Nursery	61
Airline Blueberry Farm	63	Egyptian Nursery & Land-		Nalen, J. L.	59
Allen Nurseries & Seed House	58	scape Co.	43	Nash Mole Traps	88
American Agricultural Chemi-		Evergreen Nursery Co.	59	National Landscape Institute	76
cal Co.	79	Fairview Evergreen Nurseries	51	Neosho Nurseries Co.	60
American Bulb Co.	64	Farmers Wholesale Nursery	47	New Amsterdam Import Co.	87
American Chemical Paint Co.	90	Felins Tying Machine	78	New Delta Nursery	53
American Color & Chemical		Fertigator Co.	84	Northern Indiana Evergreen	
Co.	86	Fike Nurseries	59	Co.	59
American Soil Sponge Selling		Florida Pipe & Supply Co., Inc.	80	North Pole Nursery	57
Corp.	64	Forest Nursery Co.	40-41	Old Orchard Gardens	51
Andrews Nursery Co.	2	Foster Nursery Co.	65	Ozarks Plant Farms, Inc.	46
Arborist Supply Co., Inc.	82	Frazier Nursery Co.	65	Pacific Coast Nursery	69
Ariens Co.	81	Garden Shop, Inc.	83	Pallack Bros. Nurseries, Inc.	56
Armstrong Nurseries	45	Gardner's Nurseries	55	Patton, I. C.	61
Arp Nursery Co.	30	Gold Chestnut Nursery	42	Paw Paw Nurseries	61
Atkins & Durbrow, Inc.	32	Graham-Paige Motor Corp.	29	Perry Nursery Co., O. H.	53
Atkin's Sons, L.	82	Gray Nurseries	64	Peterson & Dering	69
Atlantic Supply Co.	74	Grinels Nursery	58	Phillips Nursery Co., S. M.	49
Atlas Supply Division	80	Grobaker, Calvin S.	58	Plant-Chem, Inc.	86
Bagatelle Nursery	57	Grootendorst & Sons, F. J.	50	Plumfield Nurseries	34
Bailey Nurseries, J. V.	55	Gro-Quick	85	Pontiac Nursery Co.	59
Ball, Inc., Geo. J.	53	Guldemon & Co.	50	Portland Wholesale Nursery	
Basham, V. P.	65	Halpern Bros.	89	Co.	69
Bass Nursery	61	Harrison Bros. Nurseries	65	Price, Archibald Enoch	55
Beck Co., M. J.	57	Hauck Mfg. Co.	85	Princeton Nurseries	63
Beets, Inc.	82	Herbst Bros.	23	Rambo's Wholesale Nursery,	
Berryhill Nursery Co.	45	Hess' Nurseries	55	L. J.	60
Bobbink & Atkins	55	Hill Nursery Co., D.	25	Ra-Pid-Gro Corp.	85
Bountiful Ridge Nurseries	50	Highway Gardens Nursery	61	Reliance Fertilizer Co.	89
Boxwood Gardens	59	Hobbs & Sons, Inc., C. M.	65	Rich & Sons	67
Boyd Nursery Co.	38	Holton & Hunkel Co.	63	Richard Co., L.	85
Brentwood Berry Gardens	24	Homestead Nurseries	50	Rivet-O Mfg. Co.	80
Brimfield Gardens	57	Horsford, Wm. Crosby	55	Robinson Sales Agency, E. D.	43
Broadway Rubber Mfg. Co.	83-88	Horticultural Realty Co.	78	Romines Plant Farms	49
Brownell Rose Research		Howard-Hickory Co.	64	Roper Mfg. Co.	73
Gardens	54	Howard Rose Co.	67	Scarff's Sons, W. N.	51
Bryant's Nurseries	63	Hudson Mfg. Co., H. D.	37	Schifferli & Son Nurseries, F. E.	59
Buckmaster-Gay, Inc.	84	Hydroponic Chemical Co., Inc.	80	Scotch Grove Nursery	36
Bulk & Co.	50	Ideal Nursery & Orchard Co.	60	Scruggs Nursery	58
Bulk's Nurseries	48	Ittner Bros.	82	Schupp Florist Supply Co.	87
Burhans & Associates	35	Jackson & Perkins Co.	36	Schuykill Chemical Co.	86
Burklyn Co.	33	Jewell Nurseries, Inc.	57	Shavings & Sawdust Co.	84
Burr & Co., Inc., C. R.	27	Johnson, Ralph M.	57	Sherman Nursery Co.	63
Burton's Hilltop Nurseries	63	Johnston, William A.	68	Sherwood Nursery Co.	69
Calapooia Berry Farm &		Kallay Bros. Co.	63	Sizemore, Charles	30
Nursery	67	Kelly Bros. Nurseries, Inc.	64	Smith Corp., W.-T.	30
California Nursery Co.	64	Koster Nursery Co.	54	Sneed Nursery Co.	36
California Spray-Chem.		Krieger's Wholesale Nurs.	39	Somerset Rose Nursery, Inc.	86
Corp.	86	LaBars' Rhododendron Nursery	56	Speedy Products	89
Cameron & Co.	68	Laminite Products	54	Sprayer Corp. of America	88
Carscallen Nursery Label Co.	66	Lake's Shenandoah Nurseries	34	Standard Engineering Works	76
Carpenter & Co., Geo. B.	78	Las Positas Nursery	68	State Road Nursery	56
Carroll Gardens	57	Leonard & Sons, A. M.	88	Sudbury Soil Test Laboratory	88
Chase Bag Co.	73	Lindig's Mfg. Co.	86	Suncrest Evergreen Nurseries	61
Chase Co., Benjamin	82	Lindley Nurseries, Inc.	48	Surtees, John	52
Chase Nursery Co.	44	Loewith, Inc., Julius	88	Tillman-Eakins Nursery	36
Classified Ads	70-71	Lovett, Lester	61	Timberland Products, Inc.	62
Classen Co.	34	Mack's Anti-Weed Gun	76	Townsend & Son Nurseries,	
Cloverset Flower Farm	77	Maloney Bros. Nursery Co., Inc.	57	E. W.	65
Colby Co., Eli	87	Markham's Ohio Nursery	86	Union Pacific Railroad	31
Concord Chemical Products,		Markle Featherlite Products		U. S. Espalier Nursery Co.,	
Inc.	75	Corp.	83	Inc.	68
Congdon, H. E.	63	Max Nursery	64	Verhalen Nursery Co.	74
Crystal Soap & Chem. Co.,		McCarver & Sons, Johnie	61	Virginia Tree Farm	59
Inc.	84	McFarland Advertising Service	81	Want Ads	72
Cumberland Valley Nurseries,		McGill & Son, A.	69	Washington Nurseries	68
Inc.	63	McHutchison & Co.	83	Waynesboro Nurseries	64
Curtis Nurseries	63	Meehan Co., Thos. B.	55-89	Wayside Gardens Co.	91
Cutler & Downing Co.	65	Milton Nursery Co.	69	Weller Nurseries Co.	55
Cutler & Vennard Nursery	54	Minich Nurseries, R. G.	58	West Hill Nurseries	61
Dayton Fruit Tree Label Co.	80	Monarch Shingle Co.	68	Westminster Nurseries	49
Del Rancho Fortuna	66	Moran, E. C.	64	Williams & Harvey Nurseries	79
Doerfler & Sons, F. A.	68	Morse Co., A. B.	92	Willis Nursery Co.	52-55
Doty & Doerner, Inc.	69	Mount Arbor Nurseries	5	Willmot's	56
Dollar Nursery	53	Mullins Plant Farms	24	Wittman, Emil A.	47
Dow Chemical Co.	78			Wonderland Nurseries	57
Dummett, Arthur	50			Woodruff & Sons, Inc., F. H.	64
Dunlap Nurseries	61			Wood Specialties Co.	67

**SUPERIOR QUALITY** *and* **SERVICE**  
FOR **70** YEARS!

## TO THE TRADE

Our summer field estimates and records are about completed so we now have more definite information as to our supply of stock available for the coming year. We will have our usual large assortment. Many lines will again be in short supply and in our opinion, it will be to your advantage to book the larger part of your requirements early.

Send us your Want Lists. We will appreciate the opportunity to quote.

By early August, our salesmen will be at work and they are looking forward to seeing you as frequently as possible during the year.



**Mount Arbor Nurseries**  
SHENANDOAH IOWA

*One of America's Foremost Nurseries*

E. S. WELCH, President • H. S. WELCH, Vice President • G. L. WELCH, Mgr., Wholesale Sales



## AMERICAN NURSERYMAN

F. R. KILNER, Editor

### Editorial

#### VICTORY CONVENTION.

For the first time in four years, the American Association of Nurserymen this month is holding a full convention of members. This is fittingly entitled a victory convention, for it celebrates the success of our country in the late hostilities and the return to peace.

Fittingly, the program of the victory convention gives ample time for celebration, in the form of sight-seeing and in the enjoyment of the facilities at Miami Beach that were not available during the war on account of the presence of the military training there.

That was the thought in view when the members of the association voted to hold the victory convention at New Orleans, but neither that city nor any central location could accommodate so large a convention in July of this year. Probably few places could be found, if any, where members bent on celebration and rejoicing could have surroundings so thoroughly adequate for that purpose.

At the same time, a victory convention is one of thanksgiving for the end of a great war and for the return of sons and daughters from service, so that the nursery industry may go forward in those accomplishments which it can achieve only in time of peace.

After marking time in the war years, with diversion of virtually all able-bodied workers to military service or war work and with the diversion of much land and remaining help to food production, the nursery industry looks forward to years of increased activity and greater service to the American public. The home grounds of old customers need attention. The vast program of home building which stretches ahead will demand trees and shrubs for the adornment of the houses. Projects of all kinds for public and private beautification of our cities, highways and countryside will require further need for our products. The victory of our armed forces in war provides the opportunity for achievement by nurserymen in time of peace.

#### OUR LARGEST ISSUE.

In line with the growth in volume of business during the current year, this A. A. N. convention number

### The Mirror of the Trade

sets a new record in size for issues of the American Nurseryman. This record size is not a sales achievement, because little more was done than to issue announcement of the special number. While the yearly growth of the magazine is in part responsible, because both subscription list and advertising volume are much ahead of any previous year's, readers will note that a considerable showing is due to announcements of equipment and supplies that reflect the return of the country to peacetime production.

As higher standards of living encourage the progress of ornamental horticulture in a nation, as history well records, we may expect notable advancement in our land in the years immediately ahead. No other nation has brought to its citizens so high a standard of living as we have in America today, and while life of a frontier type has not altogether disappeared, most of our broad country may be considered as thoroughly settled and ripe for the hand of the landscape planter today.

In that notable advance there is call, not only for more trees and shrubs—which are short of the demand currently—but for those products of the inventive mind which make gardening a more pleasant and easier undertaking, for professional and amateur. As these items appear on the market, their announcement is interestedly noted by trade and public alike. The number of them is another reason why this issue is outstanding.

#### SELLERS' MARKET AT END?

Some discussion is appearing in newspapers and business magazines about whether or not signs are visible that the sellers' market is at an end. Sales records of department stores and other retail outlets indicate that the buyers are as eager as ever to seize any merchandise put on the counter. Probably the eagerness is not quite so strong as that, for there is a disposition not to take inferior substitute merchandise.

On the other hand, some recent and relatively unpublicized developments are cited in support of the view that the sellers' market is not what it was. While many orders are on file for radios of standard makes, instruments of unknown names stand on dealers' shelves. It is reported that a quiet, spontaneous home buyers' strike has developed on the west coast in protest against houses priced at an

average of three times their prewar values. Some retail stores report that persons on waiting lists for scarce items are now less urgent in their inquiries about them.

Some shrinkage in demand has been caused by a change from wartime ways of spending leisure to those of peace. For instance, some of the pulp magazines of comics and lurid stories which mushroomed for soldiers' perusal now are returned unsold by newsstand dealers in large percentages.

The situation is not clear enough to warrant the broad assertion that a buyers' strike is evident, and in a great many items there is no doubt that a sellers' market still prevails, such as in paper products.

But it may be said that the public is returning to a saner and more normal evaluation of merchandise, so that it is likely to wait until overpriced items come down and to delay purchases until quality is nearer to that desired.

So far as nurserymen are concerned, the conclusion seems to be that our market is becoming more nearly normal, and that abnormal practices borne of wartime should be discarded in favor of a policy of supplying adequate and courteous service to clients and seeking that satisfaction on the part of customers which is the basis for permanent business success.

#### NEW FIRMS INCREASE.

According to the published results of a lengthy survey of American business firms made by the United States Department of Commerce, there were 3,235,000 business organizations in the country at the beginning of 1946, roughly 400,000 more than at the beginning of 1944. The number of new firms established in that year was 695,000, reduced by 295,000 firms that discontinued business.

This high rate of entry into business is common to many lines of endeavor, including the nursery field. As will be noted, a relatively high percentage of businesses is discontinued, usually for lack of financial success. This prospect indicates the approach of a credit problem that was largely lacking during the war, when few new enterprises were established and dealings were with firms whose record or history was known to sellers.

# First Postwar A. A. N. Convention

The first full convention of members of the American Association of Nurserymen since 1942 is being held at Miami Beach, July 15 to 18, with an advance registration which indicates a large and representative gathering, though the meeting place is in a far corner of the country. Designated the victory convention, the meeting has been designed to take care of the necessary business in expeditious manner, as will be noted by the detailed schedule published on the following page, and to provide ample time for the celebration that is befitting the event.

After the members' convention at Kansas City in 1942, the nation's transportation system was so largely required for hauling war equipment and troops that conventions were banned by the wartime Office of Defense Transportation. So no meeting was held at all in the summer of 1943, except that of the A. A. N. executive committee at the headquarters at Washington, D. C., when officers and members of the executive committee were held over for another year.

Because the wartime ban was relaxed somewhat and gatherings of ninety persons or less were permitted, the board of governors was convened at Cincinnati in July, 1944. The board is composed of representatives from state chapters and transacts the business of the association even at the annual members' conventions. So business was dispatched normally at that time, and new officers were elected.

Tightening of the ban in 1945 pre-

vented the meeting of so large a group as the board of governors. So the executive committee met at Chicago and took such action as was necessary, holding over the members of the executive committee whose terms would have expired in that year, with the exception of J. Frank Sneed, whose resignation at the executive committee meeting caused the subsequent selection of Ross R. Wolfe to represent the southwest on the board. Mr. Sneed's resignation occasioned the election of Arthur H. Hill as president, while the former continued on the executive committee as a member at large, the position held by the retiring president and vacated by the resignation of Frank S. LaBar. The only other change in the official roster at that time was the election of Howard C. Taylor as treasurer to succeed Mr. Hill.

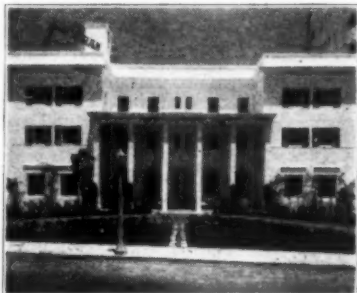
Because members of the executive committee were thus retained in office one year, they will be succeeded this year by the election of new members in regions 2, 4 and 6 for a 1-year

term and in regions 1, 3 and 5 for a 2-year term.

While the executive committee met at Chicago in July, 1945, an advisory meeting was held of one delegate from each chapter to consider activities to be undertaken by the national association in the postwar era. In consequence of the discussion by the chapter representatives, a notable decision was made, that of a publicity program to be financed by an assessment of forty per cent of the annual dues. This was approved at a special meeting of the board of governors at Chicago in January of this year. The dues being paid at midyear are accompanied by the amount of this assessment.

As in the case of interpretation of social security and wage-hour laws, to mention only two of the most important matters of legislation, in the years prior to the war, the Washington office represented its members actively and effectively with the government departments. As the offices and bureaus multiplied to regulate civilian life during the war, so did the contacts required at Washington increase in number. The addition of John W. Baringer, former head of nursery inspection in Ohio, to assist Secretary Richard P. White at Washington was a move to meet the increasing demands.

The passing of wartime controls has removed some of the added burden on the headquarters office, and the peacetime projects which have been discussed and formulated to some extent undoubtedly will appear for decisive action by the board of governors at its victory convention.



Georgian Hotel.



National Hotel.



Ritz Plaza Hotel.



Shelborne Hotel.

# American Association of Nurserymen

## Seventy-first Convention, at Miami Beach, Fla.

### COMPLETE PROGRAM SCHEDULE

#### SATURDAY, JULY 13.

- 9:30 A. M. Ornamental Growers' Association, Stock Committee. Parlor A, Georgian hotel.  
2:30 P. M. Wholesale Fruit Tree Growers' Association, Stock Committee. Parlor A, Georgian hotel.

#### SUNDAY, JULY 14.

- 10:00 A. M. Ornamental Growers' Association. Parlor A, Georgian hotel.  
11:00 A. M. A. A. N. Executive Committee. Mezzanine, Shelborne hotel.  
2:30 P. M. A. A. N. Executive Committee. Mezzanine, Shelborne hotel.  
2:30 P. M. Wholesale Fruit Tree Growers' Association. Parlor A, Georgian hotel.

#### MONDAY, JULY 15.

- 9:30 A. M. All-America Rose Selections, Inc. Parlor A, Georgian hotel.  
9:30 A. M. Retail Nurserymen's Association of the United States. Mezzanine, Shelborne hotel.  
2:00 P. M. A. A. N. Executive Committee. Mezzanine, Shelborne hotel.  
2:00 P. M. National Association of Plant Patent Owners. Parlor A, Georgian hotel.  
9:30 A. M. National Landscape Nurserymen's Association. Coral room, Ritz Plaza hotel.  
2:00 P. M.

#### TUESDAY, JULY 16.

- 10:00 A. M. A. A. N. General Meeting. Main dining room, Ritz Plaza hotel.  
Call to order, by President Arthur H. Hill.  
Report of credentials committee.  
Roll call of delegates.  
Address, "Welcome to Miami Beach," by Tom F. Smith, director, Miami Beach Convention Bureau.  
10:40 A. M. President's message, by Arthur H. Hill.  
11:00 A. M. Treasurer's report, by Howard C. Taylor.  
11:20 A. M. Report of executive secretary, by Richard P. White.  
2:00 P. M. Roll call of delegates.  
2:10 P. M. Review of committee activities, by Vice-president Richard H. Jones.

- 2:45 P. M. Nomination by regional delegates for executive committeemen, 1946-47.  
Nominations for officers, 1946-47.

- 3:15 P. M. Board agenda.

- 4:00 P. M. Address, "Landscape Problems of Florida," by Jack O. Holmes, president, Jack O. Holmes, Inc., Tampa, Fla.

#### WEDNESDAY, JULY 17.

- 10:00 A. M. Nikko-Wofford cruise.  
8:00 P. M. National Nurserymen's Protective Association. Parlor A, Georgian hotel.

#### THURSDAY, JULY 18.

- 10:00 A. M. A. A. N. General Meeting. Main dining room, Ritz Plaza hotel.  
Roll call of delegates.  
10:10 A. M. Discussion of committee reports.  
Arbitration.  
Botanical gardens and arboretums.  
United horticulture and plant nomenclature.  
Legislation.  
Market development and publicity.  
Membership.  
Quarantine.  
Horticulture standards.  
Trade practices and ethics.  
Trade relations.  
Transportation.  
11:30 A. M. Address, "National Fruit Variety Survey," by John T. Bregger, associate secretary, American Pomological Society, Clemson, S. C.  
2:00 P. M. Roll call of delegates.  
2:10 P. M. Address, "Research on Ornamentals by the United States Department of Agriculture," by Dr. S. L. Emsweller, principal horticulturist, Beltsville, Md.  
2:45 P. M. Discussion and adoption of budget.  
3:00 P. M. Report of committee on necrology, by F. R. Kilner.  
3:20 P. M. Completion of board agenda.  
4:00 P. M. Election of executive committee and officers.  
7:00 P. M. Buffet banquet. Palm Gardens, Roney Plaza hotel.

#### FRIDAY, JULY 19.

- 12:01 A. M. Special trains leave for Chicago and New York.

## National Landscape Nurserymen's Association

### Ritz Plaza Hotel, Miami Beach, Fla.

#### MONDAY, JULY 15.

- 10:00 A. M. President's address, by Donald D. Wyman, Bay State Nurseries, North Abington, Mass.  
10:15 A. M. Report of secretary-treasurer, by Harold E. Hunziker, M. J. Hunziker & Sons, Niles, Mich.  
10:30 A. M. Report on "Industrial Planting" booklet and "Aftercare" booklet, by George Siebenthaler, Siebenthaler Co., Dayton, O.  
10:45 A. M. Address, "The Fundamentals in Designing Small Home Grounds" (illustrated), by John V. Watkins, department of horticulture, University of Florida, Gainesville.  
11:30 A. M. Address, "Good Labor Relations," by Charles S. Burr, C. R. Burr & Co., Inc., Manchester, Conn.  
12:00 Appointment of committees.  
1:30 P. M. Address, "Selling Plantings from Sales Grounds," by Ray Hartman, Leonard Coates Nurseries, Inc., San Jose, Cal.  
2:00 P. M. Address, "Personnel of a Landscape Organization," by Louis Hillenmeyer, Jr., Hillenmeyer Nurseries, Lexington, Ky.  
2:30 P. M. Address, "Costs in Landscape Operations," Harold E. Hunziker, Niles, Mich.  
3:00 P. M. Discussion, "Results of War Memorial Planting Program." Questions and answers.  
3:45 P. M. Election of officers.  
4:00 P. M. Adjournment.



# Sixty-second President Presents Message

By A. H. Hill

I am reporting to you on my stewardship of the A. A. N. for the past year, and I am also taking the liberty, as your president, of making certain recommendations which I deem of importance to you individually and to the trade as a whole. The first part of my remarks, therefore, will be devoted directly to association affairs, while the second part will be given to my recommendations.

During the past year several very important matters, from an association viewpoint, have been raised, and in looking back over my tenure in office, it is more evident now than then that it has been a year of real problems and of real progress.

## Membership.

I wish first to note that on July 1, 1945, we boasted of 955 members. On July 1, 1946, we registered 1,038. I shall have more to say about membership in the A. A. N. later in this report.

## Executive Secretary.

One of the major problems that confronted my administration was the threat of losing our executive secretary to either one of two other associations which were bidding for his services. One offered equal pay with increased security and the other offered greatly increased compensation.

As president of the A. A. N., I immediately went to Washington and had a conference with Dick White, in which Treasurer Howard Taylor and Past President Frank LaBar participated.

We proposed the following solution, which has met with the unanimous approval of your executive committee and, if approved by the board of governors here at Miami Beach, will insure the retention of Secretary White in his present post. It is our opinion, as I feel it is yours, that Dick White is invaluable to our association and by the same token he is valuable to any other group. We discussed the many phases quite frankly and suggest the following procedures, which are acceptable to Dick:

1. That he be relieved of much of the travel burden, which he has as-

sumed, and this to be by executive committee decree.

2. That he be released from the burden that presently confronts him with respect to the responsibility incident to carrying out a tremendous publicity and promotional job with a relatively small sum. Our thought here is that we should continue to collect this assessment annually and earmark it for publicity purposes, and use it at such time as the need for publicity is more urgent.

3. That we provide in our budget the necessary sum of money to insure



A. H. Hill.

Dick an income of \$5,000 per year for life upon reaching the age of 65.

This arrangement can be adequately financed from current income and will in no way affect our reserves nor the money collected for publicity purposes.

The costs of this proposal have been included in the budget for 1946-47 and a vote for approval of the budget as presented will be a vote approving of these arrangements.

## Public Relations.

The original movement for the establishment of a publicity program started in the previous administration. As a result of a poll of a selected list of members, distributed in all states and in all dues classifications, it was indicated that a large number of our members believed that the A. A. N. should plan to sponsor a program designed to increase the demand for our commodities.

Last July the executive committee asked each chapter to send one repre-

sentative to Chicago to explore the possibilities of such a postwar publicity program and means of financing it. A special committee was appointed, as the result of this meeting, further to investigate the matter in light of the recommendations that were made.

This committee met late in August and drafted a set of tentative proposals which were circulated to all the members. The full board was called into session January 17, 1946, to consider these proposals. The result was the adoption by the board of governors of a resolution, that a promotional program be initiated July 1, 1946, to be financed by an assessment of forty per cent of the yearly dues annually, and to be under the immediate supervision of the Washington office and subject to the approval of the executive committee.

This resolution indicated the initiation of the program July 1, 1946, subject to the approval of the executive committee. The program has not been initiated for several reasons. In the first place, the executive committee did not feel the program should be initiated until such time as the money to support the program was in sight. It would be disastrous to this program and to the association if activities such as were contemplated in Chicago were to be initiated on the supposition that funds would be available and then to discover, too late, that the money collected was not sufficient to cover the costs. Unless such activities are generally and enthusiastically supported, the program would not be effective.

Another factor which has deterred the executive committee from immediate action on this matter is the situation in regard to the Washington office. By January 1 it was expected that additional office space would be available. However, because of the return of several governmental agencies to Washington from other cities to which they had been transferred during the war, of the maintenance of large purchasing agencies of foreign governments which occupy hundreds of thousands of feet of office space, and of the nonreduction of our own government bureaus and agencies, the office space situation in Washington today is just as bad as it was during the war, if not worse. We see no relief in sight in the near future.

Since it was proposed that this pub-

Address of A. H. Hill, president of the American Association of Nurserymen, presented at the annual convention at Miami Beach.

licity program be headquartered in the Washington office, additional office space is imperative before we can start. In fact, additional office space is sorely needed for our present personnel.

It is my recommendation that in view of a possibly greater need for publicity in the years ahead, when our inventories have been built up and the demand begins to lessen, the monies collected by this forty per cent assessment be earmarked and laid aside for use when the situation eases and the board decides to proceed under more favorable circumstances.

#### Quarantine Policy.

This will be mentioned in detail in the report of the quarantine and legislative committees, but the importance of the situation merits a few general statements by your president.

At the July, 1944, meeting of the executive committee, the following statement of policy was adopted:

"It is the sense of the executive committee of the A. A. N. that in view of the inadequacy of plant inspection in foreign lands and further in view of the inadequacy of information on commodity treatments of plants for pest control purposes, no modifications of the import restrictions of living plants as present constituted under foreign plant quarantine 37 be considered. It is further our feeling that any changes that may be considered in the future be submitted to the industry before final action is taken."

It was not known at that time by the industry or by our state regulatory officials that modifications of the rules and regulations had been made in 1943 which would permit unlimited entry into the United States of many types of nursery stock with attendant pest risks.

Acting under this policy statement of 1944 and in view of the reported relaxation of import requirements which again opens this country up to a flood of foreign pests, which may seriously affect American agriculture, horticulture and forestry, the executive committee, January 16, 1946, authorized the executive secretary to take all possible means to reestablish adequate protection against foreign pests. The full board of governors, January 17, 1946, unanimously approved of this action of the executive committee. The result has been the introduction of S-1990 and H.R. 6433 authorizing the Secretary of Agriculture to reestablish quantity limits on imported nursery stock and to require that such imports as may be

made be grown under postentry requirements to insure their freedom from plant pests. Opportunity for discussion concerning the present situation regarding these bills will be had at this meeting.

#### Fruit Variety Survey.

In cooperation with the American Pomological Society, a variety survey of peaches, apples and strawberries was undertaken.

This survey, jointly conducted, has already resulted in some valuable information for our fruit nursery stock producers and will be discussed thoroughly by a representative of the American Pomological Society later on the program.

The objectives of this survey are (1) to determine the trends of thought among commercial producers of these fruits in respect to varieties and (2) to determine the trends of production by varieties by commercial nurserymen.

The American Pomological Society, through surveys in the major fruit-producing areas of the country, is determining the relative popularity of varieties in the minds of commercial orchardists. The A. A. N., through its survey, is determining the trends of production. The A. A. N. is supporting this joint project by a grant of \$1,000 per year for two years.

#### Price Survey.

During the year an analysis of catalog prices, both wholesale and retail, was completed and the data were submitted to the membership in our news-letter.

This study clearly indicated several important facts: First, a steady increase in prices of all nursery stock since 1940 has taken place, but which, in the case of small and standard fruits, has not kept pace with the price increases of the fresh fruits which are produced. Second, wholesale prices and retail prices have, in general, advanced equally percentage-wise. Third, that the price increases since 1940 of ornamental stock have advanced only fifty per cent roughly of the advances in small and standard fruits.

It is my opinion that this analysis of our price structure is valuable in that it gives us each some basic industry information on prices, which should enable us individually to conduct our business enterprises on a sounder basis. I recommend that these studies be continued.

#### Relationships with Affiliated Groups.

In cooperation with the National Landscape Nurserymen's Association

and others, the A. A. N. assisted in sponsoring and displaying and in distributing the winning plans resulting from the salesyard contest last year. This contest and the plans resulting therefrom have created a lot of interest among our landscape members and others. The question raised, however, is how far can the A. A. N. go financially and otherwise in supporting special projects of one affiliated group without equally supporting programs of other affiliated groups? It is true that members of the N. L. N. A. are all members of the A. A. N., a requirement for membership, which is not true of any other of the special groups. It is also true that the members of the N. L. N. A. are those members who are actually engaged in transferring nursery stock from the trade to the consumer, getting it out of trade channels once and for all. It is also true that the relationships between the retail landscape nurseryman and the consuming public determine, in large degree, the "public relations" of the industry. But where is the line to be drawn? Shall we expend all our resources and efforts in assisting one group in activities of benefit directly to it, admittedly of benefit indirectly to us all, or shall we attempt to spread our finances and efforts over all phases of the industry? And who is to make the decision and under what guiding principles? As I have stated, the executive committees of several administrations have been struggling with this problem without finding a satisfactory solution.

For the future welfare of the A. A. N. and also of the affiliated groups, I believe this entire relationship problem and the mutual obligations of all groups involved should be clearly defined.

#### General Recommendations.

##### Membership.

Since the reorganization of the A. A. N. in 1937 our membership has shown consistent increases from year to year. Loss of membership by resignations or otherwise has been consistently low. These two facts of record mean that the members of the A. A. N. value their membership and feel that they are receiving full value from their investment.

The A. A. N. badge book for 1936 showed a total of 278 active and associate members. The 1946 badge book records 1,028 active and associate members, an increase of 750.

However, there are over 1,500

[Continued on page 56]

# Secretary Pictures Capital Today

By R. P. White

During the war Washington was not such a bad city to live and work in. Federal war agencies were not, in retrospect, too difficult to get along with. We all had a common objective, and that objective was met. As an industry, we were hampered, of course, in many ways, but we suffered under regulations without complaint, whenever we were convinced these were necessary. When not convinced, war agencies were willing to listen and to adjust. The over-all result of four years of war to this industry was that it came through the war without too many scars.

All this has changed, however, since V-J day. The common objective no longer exists—the definiteness of purpose in the executive and legislative, and I might also include the judicial, branches of our government no longer pertains. There seems to be no likelihood of reconciliation between the views of the Congress on basic legislation and the views of the executive branch. They are poles apart on labor, on price control, on wage and hour amendments, on farm parity, on return of the state employment services to the states, on fair employment practices and on many other matters of basic importance to our domestic economy.

Following the war, one would normally expect that the government pay roll would be drastically contracted. One would certainly be led to believe that it should be reduced when the headlines proclaim the dissolution of this or that agency. Here is what has happened.

The Smaller War Plants Corporation was dissolved. What became of all its personnel? Some went to the Department of Commerce, some to the Reconstruction Finance Corporation—none were discharged. The Foreign Economic Administration split four ways when it came to an end. Part went to Commerce, part to State, part to Agriculture and the rest were taken in by the R. F. C. The Office of Strategic Services, one of the real hush-hush agencies spawned by the war, no longer exists, but its counterparts, and incidentally its personnel, appear now in the War Department and the State Department. And that superpropaganda agency of the war, the Office of War

Information, could no longer be justified; so the State Department took over the foreign half of its personnel and the rest is scattered throughout agencies on the domestic front.

The War Manpower Commission, the mobilizer and controller of manpower during the war, is now over in the Department of Labor. The War Labor Board has become the Wage Stabilization Board, and the Office of Economic Stabilization, after receiving the kiss of death, is back with us again for an indefinite stay. In



R. P. White.

all of these instances, transfers—no discharges.

And so it is no wonder that the help situation in Washington is worse than during the war. Agencies like W. P. B., that folded up and did actually shrink last fall under its new name of the Civilian Production Agency, took on 800 new employees this spring to handle Wyatt's housing program after its former employees had been transferred to other agencies. We lost from our office, May 15, a very capable young lady because of an unexpected transfer of her navy husband. We still are without a replacement, although we are using all employment agencies in town, both public and private, and have advertised in the press both morning and evening. We have had four applicants, none of which could take dictation, spell or hardly run a typewriter and all demanding \$40 per week as a starting wage. They are all on your pay roll as experienced

stenographers in some government agency.

One might think perhaps that the town of Washington would be loosening up a bit in regards to office space. When one agency contracts, as many have, another expands. Many federal agencies removed to other cities during the war are now back in Washington to increase the pressure. While the foreign purchasing commissions have been officially requested to go back home, they are still occupying all the office space they ever had.

Washington is bulging at the seams, as she has never bulged before. Agencies are dissolved in name only; personnel records show no major decline; government pay rolls mount with two Congressionally authorized increases of eleven per cent and fourteen per cent respectively for the average government worker during the past year, and bureaucracy rides high on its own inefficiency. It's time the people spoke through their elected representatives. I wish every American citizen could have the opportunity of seeing Washington as I have seen it.

Now, what has all this to do with the A. A. N. and the nursery industry? It has this to do with our industry. We need office space, and it cannot be found. We need office help, and the type available you would not hire. We need legislative consideration on certain matters, but because of the system built up over the past several years, one person, in a key position in any one of several departments of government, is able effectively to block even an opportunity to be heard. We need relief from wage stabilization, but on the theory that any relaxation of ceilings on agricultural wages and salaries will increase prices, we can get nowhere. Yet it has been the policy of the administration to encourage wage increases of industrial workers. Agriculture is definitely behind the 8-ball on this issue. We need farm machinery and equipment and operating supplies, but because of the utter helplessness of our government to control strikes even against the government itself, production of commodities is retarded by months. We need confidence, but I ask what event in Washington of recent vintage would inspire confidence of business. What has happened to encourage businessmen to

Report of Richard P. White, executive secretary of the American Association of Nurserymen, presented at the annual convention at Miami Beach.



produce goods and make jobs? And what event of recent times would induce the employee to take pride in his job and show his individual initiative, when he knows he and his output are controlled by union bosses and he works or doesn't work at the unions' pleasure?

These things have a most direct bearing upon our industry in that, while considered remote, they are after all close to the success of all businesses including yours.

So much for the atmosphere under which we struggle in Washington. It is not conducive to progress or even optimism, but there are association matters I wish to talk about.

#### Responsibilities of the Board.

The management and control of the association is vested in a board of governors who are selected by the membership. The board elects the officers and transacts all business. Board members are elected by their chapters for 2-year terms. In return for this association service, the association reimburses the delegates for one-half their first-class railroad and Pullman fares.

Members of the board assume responsibilities upon their election, but too often these responsibilities are taken lightly. A member elected to the board of governors is expected to take his election at least seriously enough to make every effort to keep informed as to association activities and as to the views of his constituents, and to be at board meetings. It was not the intention, I am sure, when the A. A. N. was reorganized, to set up a board of governors whose sole duty was to attend the meetings, if convenient to do so, and to collect in return from the association treasury half of their traveling expenses.

Chapter officers and members, in many cases I am sure, do not realize that the board of governors is supposed to be an elected board with the members elected for 2-year terms and certified to the Washington office at least thirty days prior to the meeting. The lack of a realization of the obligations and duties of the board is evident to me every year, when without fail, after the 30-day deadline, wires and air-mail letters are received requesting us to accept as a delegate individuals who have not even been elected by their chapters as alternates—I assume the request originating because a duly elected delegate was not attending the meeting and the person recommended happened to be.

As secretary, I have no authority to place such individuals on the

board. Chapter officers and members have no authority even to recommend or suggest that they be placed on the board. The individual member not duly elected for a 2-year term and certified in proper manner has no reason to expect to receive consideration as a board member.

If you wish to keep some semblance of organization and continuity of service in the board, and have any desire to be businesslike in the management of the association, then the members should give more serious consideration to the election of delegates, the delegates should accept the responsibilities of the office, and chapter officers should not make irregular requests that have to be denied for recognition of nonelected board members.

I make these remarks solely for the purpose of emphasizing the importance of your election to the board. It is not something that should be taken lightly.

#### Domestic Quarantines.

The quarantine committee report mentioned a proposal advanced by the state of California for quarantining all states on account of virus diseases and viruslike diseases of stone fruits. This proposal was discussed by the members of the Western Plant Board at Missoula, Mont., June 3 and 4, and was rejected.

The situation in regard to virus diseases of stone fruits, however, is of serious moment to nurserymen. The proposal of California was an attempt to find a means of preventing the dissemination of these diseases. Other quarantine proposals of a similar nature will be made and unless we ourselves take the initiative in finding a way to insure that stone-fruit nursery stock which we grow is free of these diseases and can be certified to this effect, then we can anticipate in the not distant future rather drastic quarantine action.

Fortunately, we know the procedure to follow in order to insure that your stock is free from virus diseases. We merely have to put the wheels in motion. I refer to the system of budwood certification, initiated by the state of Michigan in 1943. This system, supported by Michigan nurserymen for their own protection, will insure stock free from these virus diseases and should be adopted by every state in which stone-fruit nursery stock is produced in any quantity. It is a cooperative endeavor between the nurserymen, the state department of agriculture and the state experiment station. Unless this activity becomes of major concern to those state associations in the membership

of which are concerns producing stone-fruit stock, I predict that in a few years your market will be contracted by quarantine action.

We can clean up these stocks under our own initiative, if we will, and prevent such quarantine action. We must seek the cooperation and help of our state departments and agricultural colleges, however, and you, in your state associations, will need to support them actively in your state legislatures in 1947, most of which will be in session. I refer you to our proceedings of 1943 to a statement by C. A. Boyer, of Michigan, on the budwood certification program of that state. The adoption of similar programs in other stone-fruit producing states is the only means I see to avoid drastic quarantine action in the future. I would suggest that the board members and others see to it that a discussion of this serious matter be brought before your next state association meeting, and in the meantime that contacts be made with your state departments of agriculture. I hope this warning will not fall on deaf ears or inactive minds, as this problem is both important and serious.

#### Committees.

Committee activity during the past year has, in some instances, been heavy, and the committee reports should be read and studied. I particularly wish to call your attention to certain of these reports:

In the quarantine and legislative committee reports will be found statements concerning the foreign plant quarantine situation. It has been a real disappointment to me that greater progress was not made. However, a system has been built up in the executive department of our government which calls for every bill introduced into Congress to clear with the budget bureau, a branch of the executive office. The budget bureau really has veto power over any suggested legislation even before hearings are held on the legislation. In our particular and current situation, I am positive, in my own mind, that the report prepared on S-1990 in the Department of Agriculture was a favorable report. Before this report could be forwarded to the Senate committee on agriculture, it had to clear the budget bureau. This executive agency forwarded the report and bill to the State Department, because it involved international trade, and probably to the Treasury Department, because it involved the question of tariff receipts, and further delay, of course, was occasioned. Time was running out.

[Continued on page 73]

# National Mail Order Association Meets

More than one-half of the 108 members of the National Mail Order Nurserymen's Association were in attendance at the annual meeting at Chicago, June 28 and 29, and the air-conditioned room at the Hotel Stevens was much preferred to the 90-degree temperature outdoors. Everyone present, of course, was interested in the crop reports on various nursery items, and on most items another year of supplies either short or no more than adequate was indicated.

In opening the meeting Friday morning, June 28, President Clifford R. Emlong praised the spirit of cooperation in the organization and the valuable assistance of the board of directors, with particular emphasis on Secretary Bert Keith, who has done much in his years of service to build up the association. Referring to the regional form of organization adopted last year, he expected this would add to the membership, and he particularly stressed the valuable meeting held by the eastern group at Philadelphia earlier in the month.

Secretary-treasurer Keith read the lengthy minutes of last year's meeting and reported a gain of about \$15 in the funds of the association, now \$291.32.

Reporting for the eastern region, Homer Kemp, Bountiful Ridge Nurseries, Princess Anne, Md., mentioned that the meeting at Philadelphia, June 6 and 7, had brought attendance from states on the eastern seaboard to as far west as Ohio and Michigan. The eastern regional group had fixed dues at \$10 and elected G. Hale Harrison president and Mr. Kemp secretary-treasurer. This regional group will succeed the former Del-Mar-Va Nurserymen's Association.

The activities of the central region, reported Clifford Emlong, were covered by the secretary's minutes. Hugh Wolfe told a sad story of meager results from his membership appeal in the south, but expected a better opportunity when the Texas Association of Nurserymen meets in August. Wayne Ferris, Hampton, Ia., said the attendance showed the good membership in his section. Henry Boyd predicted results after the meeting of the Southern Nurserymen's Association in August. No one was present from the Pacific coast.

The chair appointed a nominating committee consisting of Howard Scarff, Harold Goldstein, Leslie R. Sjulín, Tom Kyle and Walter Montfort. Reporting at the close of the

second day's session, the committee recommended the reelection of Clifford R. Emlong as president, Howard W. Maloney as vice-president and Bert W. Keith as secretary-treasurer. To the board of directors were nominated and elected Howard Scarff, Harold Goldstein, Gerry W. R. Baldwin, William Westhauser, Dave Nihart and Thomas Beggin.

The nominating committee recommended that the vice-presidents from the regional groups be considered as members of the board. These are Homer Kemp, Howard W. Maloney, Wayne Ferris, Henry Boyd, Hugh Wolfe and Sam Rich.

To consider a change in the terms of the board of directors, the chair



Clifford Emlong.

appointed a committee consisting of Gerry Baldwin, Rex Westhauser, Dave Nihart, Ollie Hobbs and A. E. Weston. The committee's report, presented at the close, recommended the adoption of the bylaws so that directors would serve for a term of three years, two out of six to be elected at each annual meeting, and any member who has served three years being not eligible to succeed himself. The regional vice-president and the immediate past president would also be members of the board.

The present bylaws prevent voting on such a change until the annual meeting a year later. This process was considered too slow, and an amendment was therefore proposed that the bylaws in future may be amended by a majority vote at any annual meeting provided that such amendment be submitted as soon as

the meeting is called to order and voted upon at a later session, in order to provide time for proper consideration by the membership.

One bylaw was adopted which had been proposed at the meeting a year before. It provides that membership is automatically extended to members of affiliated regional groups who shall qualify and that regional groups shall elect a vice-president and secretary for contact and cooperation.

At the afternoon session two addresses were given, one on "New Things in Plant Science," by Dr. H. B. Tukey, head of the department of horticulture at Michigan State College, which is published on a following page. He called attention to the prospect of biological engineering in order to eliminate some of the risk in growing crops. He pointed to the importance of plant breeding, controlled pollination, controlling fruit set and otherwise regulating fruit production. Many rather startling processes are being perfected to eliminate the gamble in crop production and to reduce the labor involved.

Joseph J. Lane, of House and Garden, New York, told of the increase in the nurserymen's market in consequence of victory gardening, estimates of the increase varying from twenty-five to fifty per cent. He spoke of the work of the United States Department of Agriculture in fostering the public interest in gardening. He expressed his belief that nurserymen were backward in advertising their wares, in contrast with the large amount of editorial material published in their behalf. Garden advertising in 1946, however, he reported showed a gain of thirty-five per cent over 1945.

First of the reports on the committee investigating crop conditions was that of Leonard Condon, Condon Bros., Rockford, Ill., who said that an ample supply of flower seeds was in prospect, but that a scarcity might develop in garden vegetable seeds because the government had bought up the surplus that was on hand last fall. Farm grass seeds may be short, including alfalfa and clover, with bluegrass actually scarce.

For the evergreens committee, Clarence Wesdorp, Krider Nurseries, Inc., Middlebury, Ind., said there appeared a shortage of salable sizes, but more of smaller sizes though they were hard to buy. Landscape

[Continued on page 52.]

# New Things in Plant Science

By H. B. Tukey

Knowledge in plant sciences and in the science of horticulture has been accelerated tremendously during the past fifty years. Yet it is still limited. No engineer could succeed with the small parcel of facts which the horticulturist has at his disposal. The engineer, with blueprints, handbook and slide rule—all based on tests and previously determined facts—works out production-line methods. Horticulture still operates too much on guesswork and on what it calls "good horticultural practice," "common sense" and the "green thumb." Of course, all of these are greatly to be prized, since they represent the sum of experience often secured the "hard way." But they need to be cataloged and rationalized so that they can be passed on to succeeding generations and used to make accurate predictions. What fruit men, nurserymen, vegetable growers, florists and ornamental horticulturists need is sufficient knowledge at their disposal to make their business enterprises more than "a way of life." What is needed is more "horticultural engineering."

Happily, there is already a good start. In the matter of improved varieties of fruits, flowers and vegetables, their creation is no longer left entirely to chance. Many new varieties are being made to order for particular needs. The V-peaches from Canada; the Hale Haven and Red Haven peaches from the Michigan experiment station at South Haven; the Golden Jubilee and Amber Gem peaches from the New Jersey experiment station; the Cortland apple, Taylor red raspberry, Sodus purple raspberry, Catskill strawberry and Stanley plum from the New York experiment station—these are all products of scientific plant breeding.

The plant breeder has learned much about good and bad parents. He knows that certain plant parents tend to stamp their offspring with desirable characters, while some are inferior sires. He knows that the Deacon Jones apple transmits size, that the Mills grape transmits high quality and that the Lloyd George raspberry and the Premier strawberry are superior as parents, whereas the Baldwin and Greening apples, the

Seckel pear—though desirable in themselves—are most inferior parents. By means of a drug (colchicine) from a species of crocus, he has been able to double the number of chromosomes in plants when he needs to do so for his breeding program. By performing a Caesarean section on immature fruits and removing partially developed embryos and culturing them like incubator babies, he can now succeed with heretofore impossible crosses. He can work out the mechanism of heredity and breed varie-



H. B. Tukey.

ties to meet local needs, market changes and shifts in consumer preferences. If enough facts were now known about the plant with which he is working, he could put factors together to make a desired individual, just as the organic chemist synthesizes new compounds. He could compound a scab-free, late-winter apple of high color, or a variety with vitamin content sufficient to compete with citrus. The time is already here to do this with some plants, and it will be speeded up just as rapidly as fruit and vegetable interests demand.

A few years ago pollination was little understood by commercial fruit growers, and its importance was unappreciated. Today, compatibilities and incompatibilities between varieties are better understood. No one would today plant a solid block of Grimes Golden or McIntosh apples,

Windsor sweet cherries, Bartlett pears or J. H. Hale peaches without providing for effective cross-pollination, and he would not use Baldwin and R. I. Greening as pollenizers. Also, it is known that early thinning of fruit is most important, and that even blossom thinning is practicable and tends to make biennial-bearing varieties become annual bearers. Yet too much of this is still in the guesswork stage for a sound horticultural industry. We shall be better off when we finally grow solid blocks of controlled trees of uniform size and stick the blossoms on where we want them rather than spend time taking them off after an uncertain set.

Matters of soils, location and site are perhaps as well understood as any aspect of fruit growing. It is known that certain areas are good for fruit production, that certain locations are suited to peaches, while others are better for pears, and that high yields of sour cherries are associated with certain regions. Yet too much of this has been learned by bitter experience rather than by accurate prediction based on fundamental knowledge, such as the oilman uses in locating oil. The soil man now determines the nutritional value of the soil, its origin, its make-up, its pH, its fertility, its moisture-holding capacity and its water table. Further, he no longer rests his case with the soil alone. He now analyzes tissue from the plant itself to see what materials are within it and what are lacking. He can show deficiencies of certain elements in the plant even when those elements are present in the soil. He has cured internal corking of apples and beets and browning of cauliflower with minute amounts of boron. He has cured little leaf of citrus with zinc, and he can detect deficiencies of magnesium, potassium, iron, copper and various trace elements and correct the trouble. But this again is only a start.

With rootstocks, the scientist has found the Shalil and Yunan peach stocks resistant to destructive nematodes in the south. He has found body stocks which are hardy to winter cold, such as Virginia Crab and Hiberna, and has shown their value in building trees which are hardy in trunk and crotches. He has shown that certain rootstocks, as Malling I, will induce early fruiting and produce small, controlled apple trees, whereas other rootstocks, as U. S. D. A. 227,

[Continued on page 54]

Address by Dr. H. B. Tukey, head of the department of horticulture at Michigan State College, East Lansing, before the National Mail Order Nurserymen's Association, at Chicago, June 28.



# Developing Sales and Display Grounds

## PART IV - BUILDINGS

By Harold E. Hunziker

Though the architectural construction on the display grounds was not to be thought of as a major consideration in the competition for designs for nursery sales and display grounds, a good many of the designs showed interesting architectural exteriors. The illustrations which accompany these articles will point this out very well. On the whole, the designers used good judgment in selecting buildings with simplicity as the keynote of the design, though some went in for some novel architectural treatment. One suggestion was that an attractive appearance could be obtained by the use of log effects or rough siding on the building. This was carried out further by the use of a split-rail type of fence

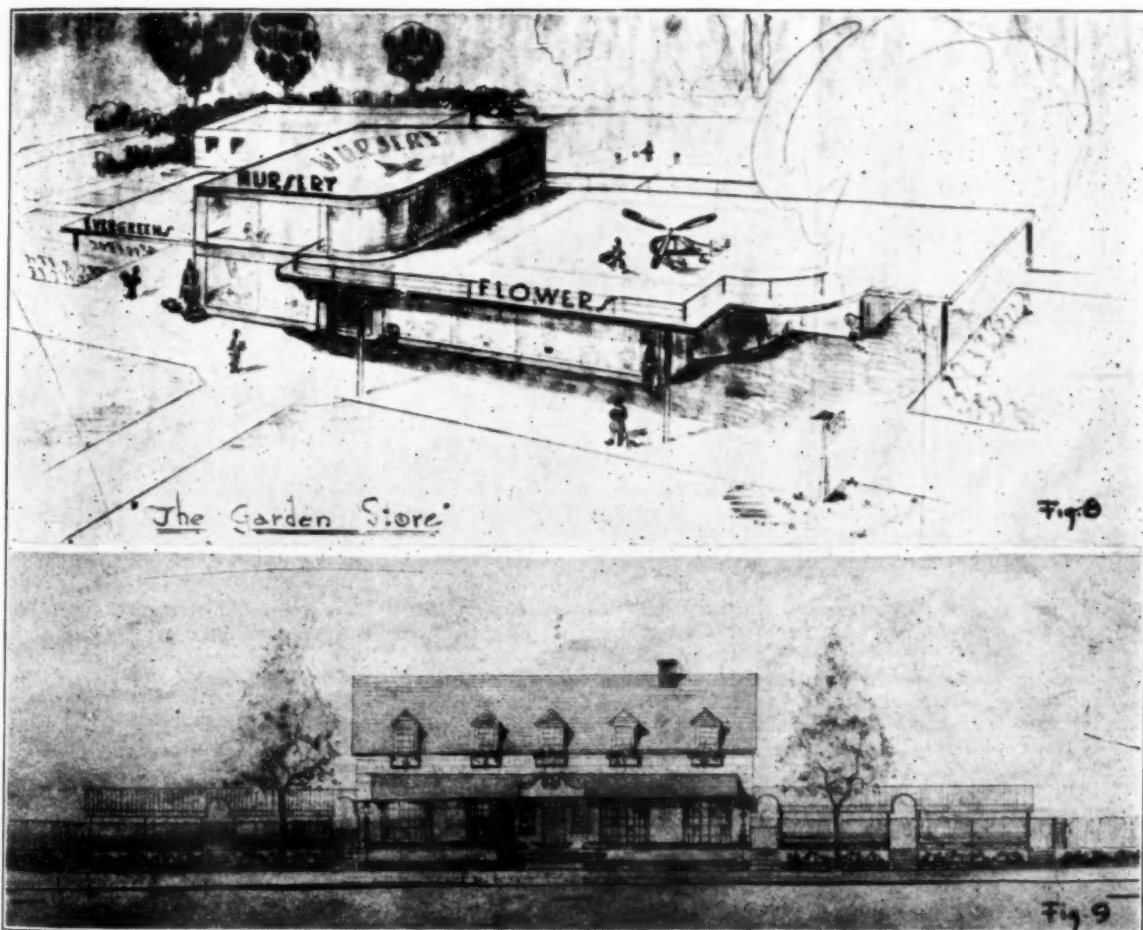
to surround the property. Another building was made of native stone in an attractive manner. Several designers chose the more modern design, which seemed to lend itself well to commercial buildings. As one contestant pointed out, the choice of the modern type was because "of its possibilities of economic costs, its adaptability to almost all regions and its attention-attractive character."

### Visual Building.

As an example of this more modern design R. J. Imlay presented, among several elevations, the one illustrated here (Figure 8) and referred to previously as the building with the autogyro landing area. If not used for this purpose, he stated in his report,

this area would be a good place to display outdoor furniture and features not subject to weather. This balcony idea was used in a display building constructed at Flint, Mich., and recently reviewed in the *American Nurseryman*.

This building follows the example of the latest thinking on modern buildings for displays, so prominently being advocated by the store front manufacturers for the postwar era. Included, for display purposes, are the wide terraces, some covered and others partly covered, for getting special materials and supplies "out front." Note the lamppost on the plan which was described in the second article of this series. This is made out of three sizes of pipe with



The Ultramodern versus the Traditional.

Figure 8 (above) shows the visual sales building designed by R. J. Imlay, South Zanesville, O. His design won an honorable mention.

Figure 9 (below) shows a beautiful colonial building designed by George Creaghan, Baltimore, Md. His plan won a mention from the judges.

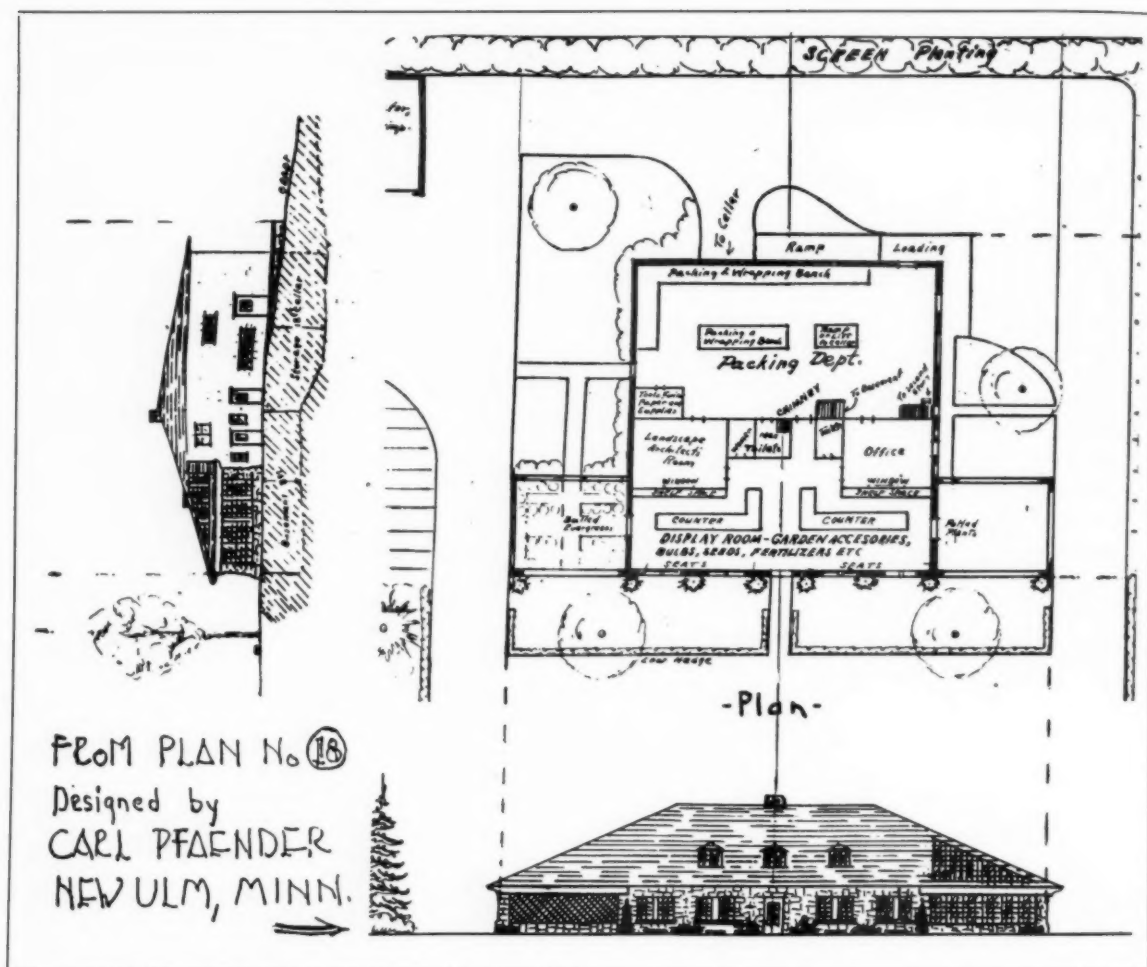


Figure 10 from the plan by Carl Pfaender, New Ulm, Minn., shows an interesting elevation and good treatment for a storage basement.

a hood shade constructed so as to cast the light downward.

#### A Colonial Building.

As a sharp contrast to the ultra-modern building is shown an elevation of a beautiful colonial sales building (Figure 9), which would fit in well within a residential community where many of the houses were of the colonial or similar type.

This most attractively designed building is elevated by about four steps, to allow for a series of display beds in front of the building, which is set well back from the highway. This additional height also allows for the fountain in front, without hiding any of its interesting features.

On either side of the building are large display terraces paved with flagstone. Overhead is a canvas covering, so that shade can be provided and sales can be made in rainy weather. The notes and floor plan (not shown) with George Creaghan's plan indicate that a good deal of

consideration was given the arrangement within the building. He states: "The executive office is so placed that its occupant may have full control of all activities. A large window affords a good view of the major parking area and general nursery. The rear door permits handy access to the greenhouse and nursery foreman's office. By this route he may visit any part of the grounds."

The spacious "visitor's store" contains a fireplace and lounge, which serves as a place to greet clients and contains things of interest to them.

The landscape office and drafting room is upstairs, as well as additional space for storage or living quarters.

#### A Stone Building.

A rather unique building meeting almost all the nursery requirements for a sales and service building is shown in Figure 10. The basement arrangement is especially attractive; and garden accessories, and shelves behind the counters give additional

so we are illustrating both the front and side elevation to show Carl Pfaender's ideas for his sales building, which he is proposing to build in the next year or two. Totally different are his ideas for a display greenhouse and a covered porch idea for balled evergreen displays. The loading platform, with ample space to get to it, is another well thought out idea, as is the lift from the basement.

In Mr. Pfaender's own words he gives a brief description of the main features of the building: "The floor plan shows arrangement of office, landscape architect's room, display room with counters, toilet facilities for employees and customers and a large packing room. The packing room is furnished with packing and wrapping benches, a small room for paper, burlap, twine, tools and supplies necessary for this department. A lift or ramp for bringing stock from the basement is shown. The display room is furnished with counters containing bins for seeds, bulbs,

display space. The floor space is adequate for display of garden furniture, accessories, fertilizers, etc., and seating room for waiting customers. A south wing with glass on three sides and on the roof is for potted plants and greenhouse display. A northside wing is for display of balled evergreens in bins with shingle tow, moss or soil, and the stock is kept in good condition. This is screened with wooden strip screen to admit partial sun and thorough ventilation."

#### Simple Building with Features.

Figure 11 shows the elevations and plan for a simple building containing several features worthy of incorporating in a sales building. It might best be described in the words of the designer, E. M. Buttery: "As designed, this unit consists of a forward section which is roofed and sealed as a display room, office, etc., as shown. The rear section is designed as an elaborated lath house with roofed ridge, but with latticed lower top, sides and one end. This may be equipped with floor beds or raised benches as desired, the idea being to provide a sample display which is open to light and air in fair weather, but which may be covered with rolled canvas on rainy days, thereby protecting the prospective purchaser. Along that part of the unit which runs at right angles to the highway an overhang of about ten feet is allowed to serve, where attached to the sealed section, as a display porch for seeds, pottery, etc., and where attached to the lath house, as a display shed for annuals, small fruits, roses, etc."

#### With Center Lath Breezeway.

Unique is the lath breezeway which separates the two units of the display building (Figure 12) designed by Milton B. Peasley. This is the only building that included such a scheme in its design. Though the front elevation of the building is not too impressive, the floor plan of the building would warrant considerable study by the prospective builder. In addition to the breezeway feature are the two well organized flagstone terraces where garden furniture and garden equipment might be displayed. Attractive, too, are the little "sample gardens," which would not take much upkeep. The sign detail is also attractive. This observer, however, cannot quite see the need for the ridged formality in having two wrapping sheds and two cinder-block storages, for instance.

#### In the Norman Style.

The layout of the third-prize design is partially illustrated here.

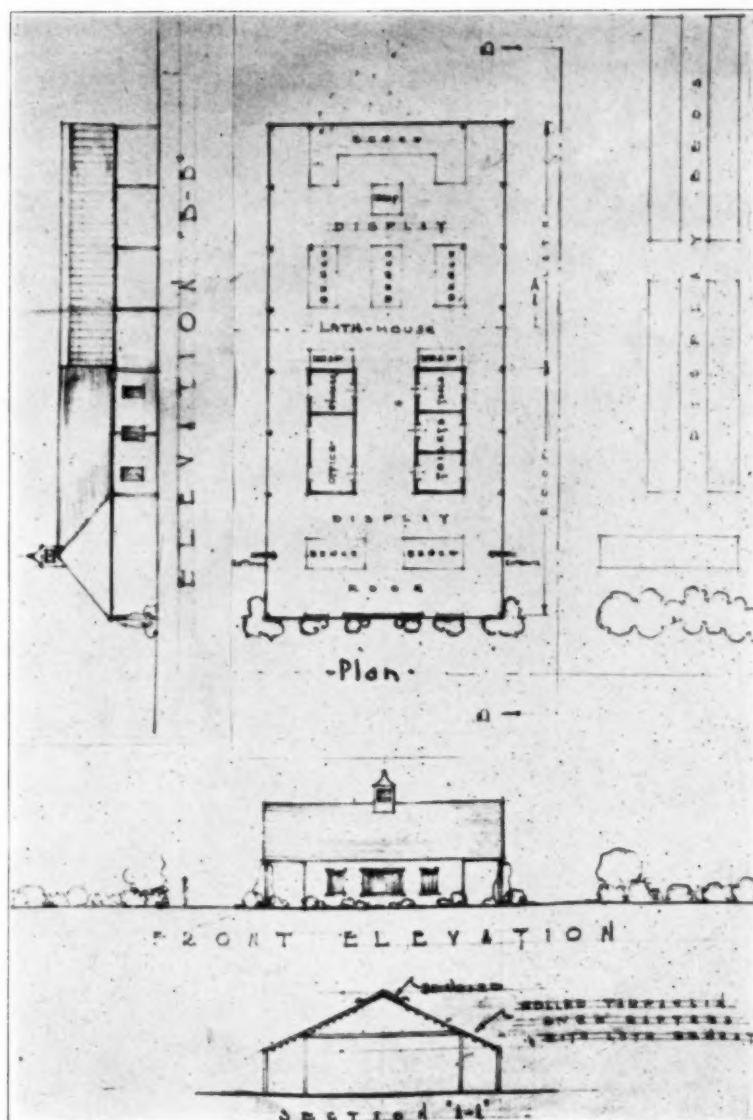


Figure 11 is from the plan of E. M. Buttery, Bethel, Conn. Here is a simple layout for a sales building with lath house attached.

Stanley A. McIntosh has chosen a Norman-style office building (Figure 13) and has kept the grounds in harmony with this style. Considerable space was given over to describing the gardens surrounding this office in a previous article. It is sufficient to print just the layout here and to draw attention as to how the buildings become a definite part of these grounds. Again, this type of setup would be welcome in any residential community, it would seem.

#### The Country Place.

One might well imagine that the plan show in Figure 14 would come out of New England. Here is presented by Julian E. Schmitz an idea for an informal layout with a building complete in almost every detail.

The building, resembling a rambling farmhouse, has a welcoming wistaria-covered arbor for a display area. From there access can be had to the display room or the main sales office. Private offices are separated from the latter area. To the rear are storage and packing rooms with garage attached. Across the service road from the main building is the greenhouse, including the necessary service building. Note the use of floodlights and lamps about the property, as well as the interesting fence and wall details.

#### Modern California Style.

Without a doubt, the nurserymen of California have done more with sales and display grounds than nurserymen in any other sections of the





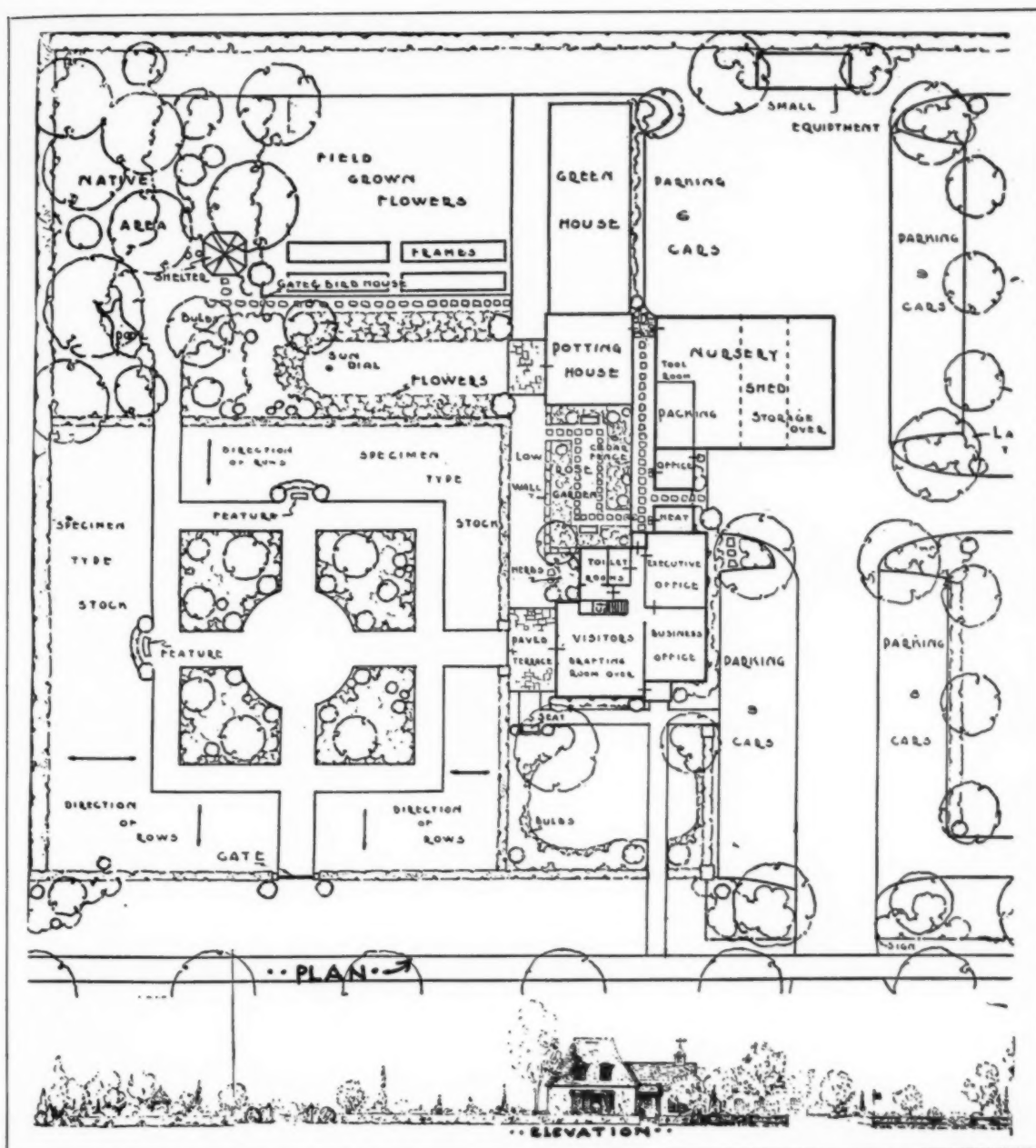


Figure 13. Here is a portion of the plan of the third-prize winner, Stanley A. McIntosh, Little Silver, New Jersey. He has used a Norman style for his office building.

of a modern display and sales area for nursery stock merchandising.

#### Service Building and Areas.

Before leaving the subject of buildings, those buildings and areas devoted to the servicing angle of the business should be commented upon.

We have already mentioned basement storages with their ramps and lifts to the packing room floors, but some of the designers thought cellars should be separate units (Figure 12).

Some designers had garages connected to their main buildings, while others had these as separate units in order to keep the service area removed from the sales building. This is true of the plan in Figure 7 and the plan in Figure 15.

#### Warehouse and Potting Areas.

In the interesting layout of Mr. Church's plan (Figure 15), special attention should be given the service area with its warehouse storage and the covered work area for potting

plants. Another interesting arrangement for this work area is shown in the service building in Figure 7. Here an orderly arrangement is made for storing manure, peat moss and topsoil for potting.

In this connection, one designer made "provisions for handling of soil, manure and peat for potting by dumping soil and manure into drop doors in the garage. Room for storing and mixing of same is under the cold-storage room. Then potting soil is elevated to potting benches by means

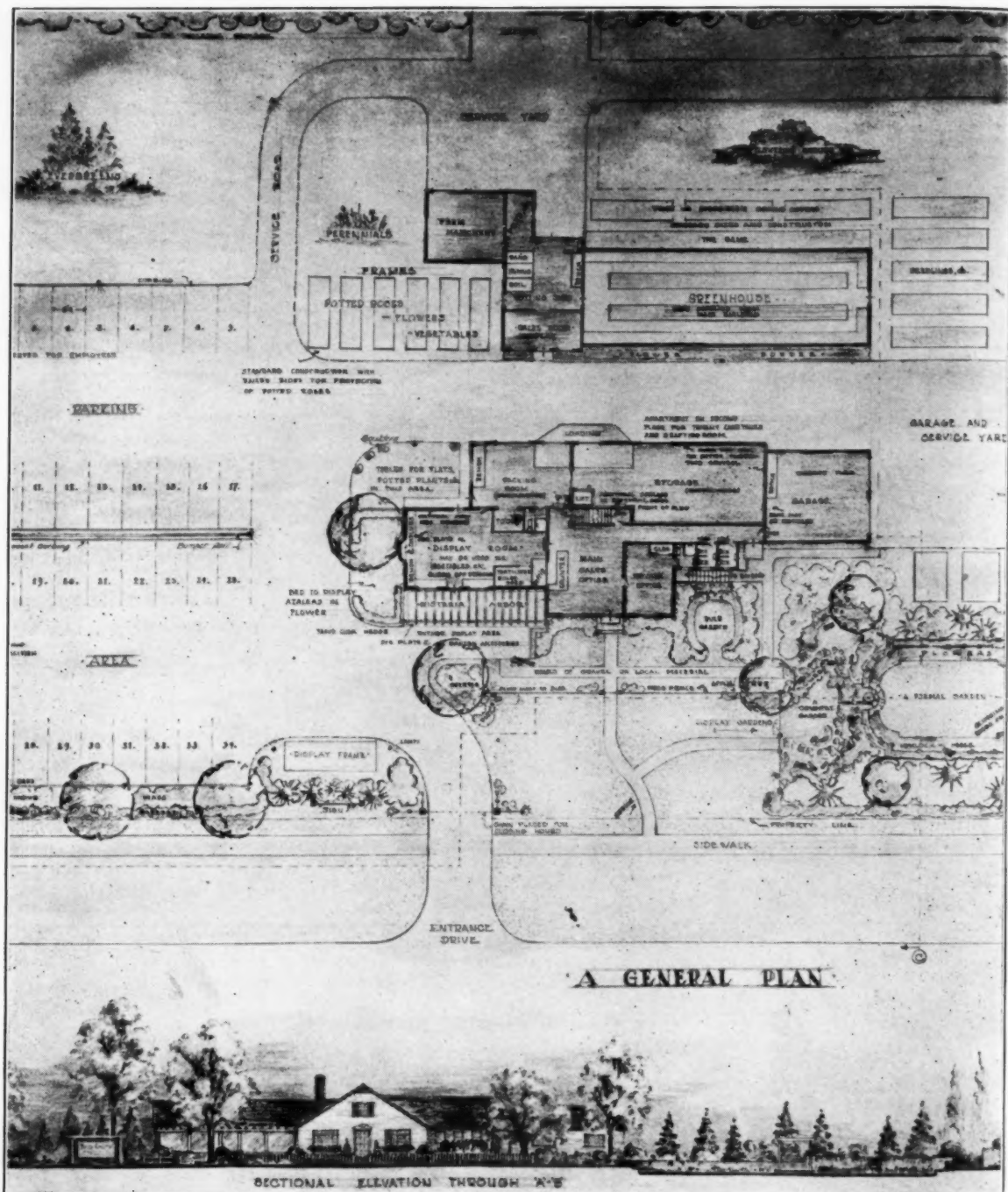


Figure 14. The informal country style was used for the buildings on the plan of Julian E. Schmitz, Watertown, Conn. This won him an honorable mention.

of elevators as indicated. Potted plants are moved to potted areas by wheel trays.

#### Loading Platforms.

One service feature that was considered thoroughly by many of the designers was the provision for loading areas and platforms. Some of these were free standing with a ramp

or steps to the dock, but more often these were worked out in connection with the service parts of the buildings. Figures 10 and 14 show good arrangement for this feature. Many of the loading platforms were covered.

In some of the designs provisions were made for areas for assembling of orders. One good scheme was to

have orders assembled and placed under a 4 or 5-foot overhang on the north side of the building, until customers came to pick up the material later in the day.

#### Outside Storage Space.

On many of the plans provisions were made for outside storage space to take care of flagstone, bricks, sand,



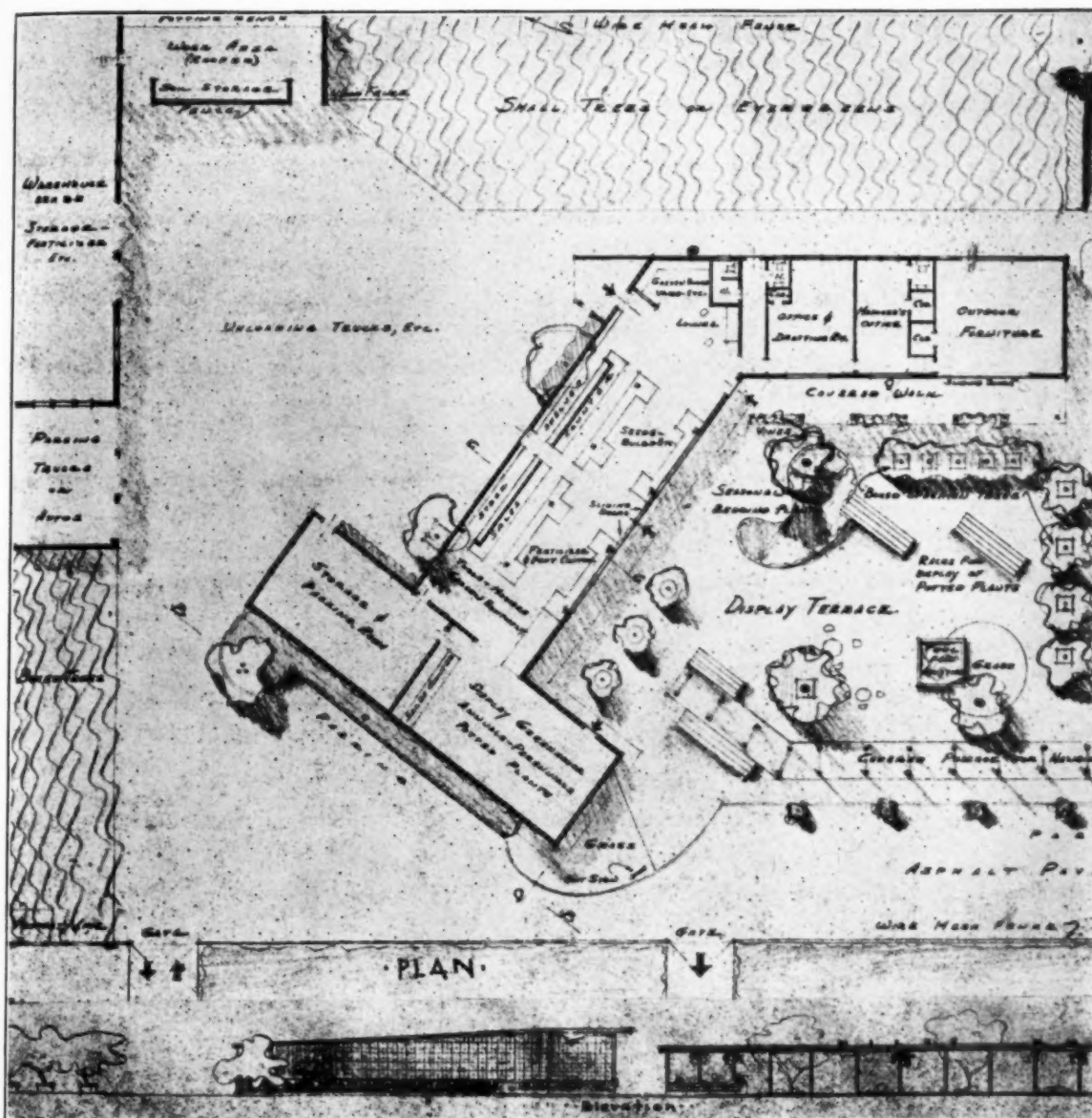


Figure 15. In true California style, this sales building and display terrace were worked out in the modern manner by Thomas D. Church, of San Francisco. His plan won an honorable mention.

loam, etc. One end could be used for incinerators and debris, to be hauled away later. Several of the plans were so all-inclusive as to include a trash burner (Figure 5). One designer went into detail on this feature, showing a "brush-burning area" surrounded by a concrete wall about six feet tall. Also (Figure 7) a rubbish area is shown surrounded on two sides with a shelter porch.

#### All Service Areas Screened.

On the majority of the plans the service areas were well hidden from the street and packing areas, with buildings, walls, fences or hedges—"evergreens to be preferred."

These service areas might even include a "recuperation area," as was indicated on one plan. The designer stated: "Often plants which are off-color, etc., will become salable in two or three weeks if planted in good soil out of sight. This area can be divided and screened so as to allow further display space, possibly for sample group planting arrangements to be sold as units."

#### Fire Protection.

On one plan provisions were even made for fire hose in an outside building. This designer was very fire-conscious, as he referred to fire walls and fire doors separating various sec-

tions of his main building. Certainly a complete plan should provide for fire protection of some sort.

#### Residences on Sales Grounds.

Because some designers thought that it was important to have people residing on the sales grounds property, a residence was provided for a foreman or other guardian of the place in off hours. As an illustration of this refer to Mr. Wilken's plan (Figure 7).

This completes the review of the buildings. The next article will cover the parking and circulation ideas about the various layouts.

## Modern Cold-Storage Building

In other seasons, especially in the past two years, when there were warm days during the winter months, as last March, C. R. Burr & Co., Inc., Manchester, Conn., experienced considerable difficulty from dormant stock sprouting in cellar storage. Many of the items which broke storage died back when put in the fields and later failed entirely.

To reduce the mortality of stock stored by this method, Burr's has had constructed a cold-storage warehouse primarily for the winter storage of perennial-type materials, such as strawberries, deciduous planting stock, fruit tree seedlings and other items that would handle satisfactorily under cold-storage conditions. Since the season for shipping perennials is limited unless refrigeration is used, further value is derived from the use of a good cold-storage house in lengthening this season.

"The proper kind of storage equipment is expensive to build, but undoubtedly, if handled in the proper manner, will pay good dividends," says George S. Harris, secretary of the company. "Several thousand strawberry plants were in prime condition even as late as the spring season after being stored in the cold storage. They were tied in bunches of twenty-six, packed in apple boxes and the roots kept in sphagnum moss. Many of the shrub items, which usually sprout before planting time when kept under ordinary cellar storage conditions, were held perfectly dormant and later proved excellent material in the fields.

Further good results from the cold storage are described by L. F. Palmer, sales manager, who reports that planting stock put in the new building held dormant and was found

to be in perfect condition even as late as the middle of June. A few rosebushes, put in the building as a test last fall, were found with the branches still green to the tips and in excellent condition on June 1.

"There is no question in our minds that the investment in equipment of this type will pay off in customer satisfaction," says Mr. Palmer, "and it certainly will reduce the mortality experienced in planting stock stored by the old method."

A complete description of the cold-storage house is given by W. L. Walker, of W. L. Walker Co., insulation engineers and contractors, Bloomfield, Conn., who designed and constructed the building especially for C. R. Burr & Co., Inc.:

"The new cold-storage plant is primarily designed for the maintenance of seedlings in a dormant condition at a storage temperature of approximately 32 degrees Fahrenheit with a relative humidity of about seventy-five to eighty per cent.

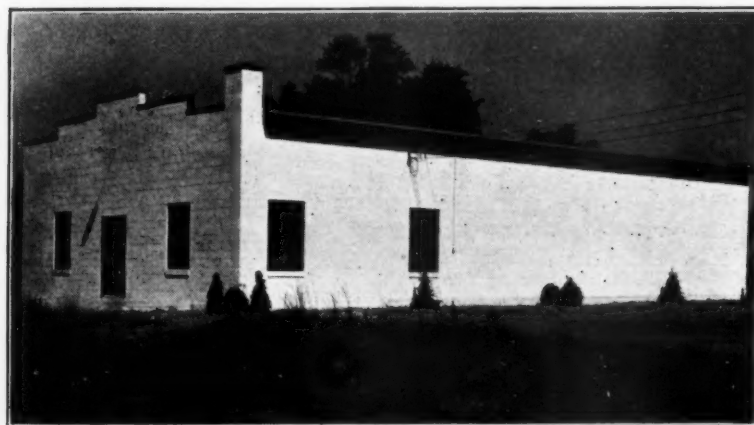
"This building, although fundamentally simple in construction, is designed to give a maximum of insulation and hence efficiency of operation with a minimum of initial cost and operating expense.

"The location chosen for this building was a relatively level plot of land. The building itself is a one-story, cinder-block building without basement, measuring 40x74 feet, with an average height of fourteen feet, these being outside dimensions. The cold-storage portion of this plant measures 36½x26½ feet, with an average height of twelve and two-thirds feet, these being inside dimensions. The balance of the building provides a packing, shipping and sorting room,

and a room for the refrigerating machine equipment.

"The foundation and footings are of solid poured concrete mixed 1-3-5 and carried three and one-half feet from the ground level to the bottom of the footings. The side walls of the cold-storage section are constructed of double cinder-block walls with a 10-inch void between, the outside wall being constructed of 6x8x16-inch cinder block, while the inner wall is constructed of 4x8x16-inch cinder block. These two walls are tied together every five feet both horizontally and vertically with ¾-inch tie rods laid in the joints. The 10-inch void between the walls is filled with fine regranulated cork. The 4-inch inner cinder-block wall extends down to the footing, which is two and one-third feet below the top of the foundation. Therefore, the insulation is carried below the floor level of the cold-storage room and provides a thermal seal for the floor insulation which consists of twenty-four inches of soft coal medium cinders well packed with a 4-inch concrete wearing floor mixed 1-2-4 laid over same. The use of well packed cinders thermally sealed in this manner provides very nearly the insulating value of four inches of corkboard and greatly reduces floor insulation costs both in material and through the elimination of a base floor. This method of floor insulation has been used in several buildings constructed by the W. L. Walker Co. covering a period of the past eight years and has proved to be practical for cold-storage temperatures of 30 degrees Fahrenheit or above and lessens initial costs considerably.

"The roof of this building is comparatively flat, pitching sixteen inches in forty-two feet, with an overhang of one foot on each long wall. The roof is built of 2x8 joists supported on purlins which are in turn supported by 6x6-inch wooden posts, the maximum span being fourteen feet. Two by fours are suspended from the joists on 16-inch centers, one end of the two by fours resting on the inner cinder-block wall and the other end toenailed to the purlins so as to create a flush ceiling. The underside of these two by fours is covered with 15-pound asphalt felt paper and sheathed on the underside with ¾-inch T. & G. sheathing. The roof is insulated with 10-inch fine regranulated cork. The roof deck is sheathed with ¾-inch T. & G. sheathing and made watertight with



New Refrigerated Storage Building Constructed for C. R. Burr & Co.

# PERENNIAL SEEDS

Achillea ptarmica The Pearl, double.....	1/4 oz.	\$0.40	Dianthus deltoides, white.....	1/4 oz.	\$0.35
Aconitum napellus, blue.....	1/4 oz.	.25	Dianthus knappi, light yellow.....	1/8 oz.	.90
Agrostemma (Lychnis) coronaria. Rose Campion.....	1/4 oz.	.25	Dianthus plumarius, single, mixed.....	per oz.	.25
Alyssum argenteum. Yellow-tuft Alyssum.....	1/8 oz.	.25	Dianthus plumarius semperflorens, double, mixed.....	1/4 oz.	.25
Alyssum montanum, yellow.....	1/8 oz.	.25	Dianthus plumarius semperflorens, single, mixed.....	per oz.	.25
Alyssum saxatile compactum Gold Dust.....	1/2 oz.	.25	Dictamnus fraxinella, purple.....	1/4 oz.	.35
Anchusa italica Dropmore.....	per oz.	.25	Eremurus bungei.....	1/8 oz.	.30
Anchusa italica Lissadell.....	per oz.	.25	Eremurus robustus.....	1/8 oz.	.25
Anchusa italica Opal.....	1/2 oz.	.25	Eremurus, Shelford hybrids.....	1/8 oz.	.45
Anchusa myosotidiflora, dwarf, bright blue.....	1/8 oz.	.75	Eremurus, yellow and orange-bronze hybrids.....	1/8 oz.	.30
Anemone coronaria The Queen, blue.....	1/4 oz.	.25	Eryngium giganteum. Silver Thistle.....	1/4 oz.	.25
Anemone coronaria The Queen, dwarf, scarlet.....	1/4 oz.	.25	Gaillardia Burgundy, large-fl.....	1/4 oz.	.30
Anemone coronaria St. Brigid, double, mixed.....	1/4 oz.	.25	Gaillardia Goblin, large-fl.....	1/4 oz.	.30
Anemone pulsatilla Lilac.....	1/8 oz.	.25	Gaillardia Tangerine, large-fl.....	1/4 oz.	.30
Anthemis kelwayi, yellow.....	1/2 oz.	.30	Gaillardia, large-fl., mixed.....	1/4 oz.	.25
Anthemis tinctoria Golden Marguerite.....	1/4 oz.	.25	Gentiana lutea, yellow.....	1/8 oz.	.40
Aquilegia chrysantha, chrome-yellow.....	1/4 oz.	.25	Gypsophila paniculata, double, white.....	1/8 oz.	.35
Aquilegia coerulea White Queen.....	1/4 oz.	.25	Gypsophila paniculata, single, white.....	1/2 oz.	.25
Aquilegia Mrs. Scott Elliott hybrids.....	1/8 oz.	.35	Gypsophila repens, dwarf, white.....	1/8 oz.	.30
Aquilegia vulgaris, single, mixed.....	per oz.	.25	Hesperis matronalis, purple.....	1/8 oz.	.40
Arabis alpina Rose.....	1/8 oz.	.85	Heuchera sanguinea, crimson.....	1/8 oz.	.60
Armeria formosa hybrids, large-fl.....	1/4 oz.	.25	Heuchera sanguinea hybrids, mixed.....	1/8 oz.	1.10
Aubrieta eyrei, dwarf, purple.....	1/8 oz.	.25	Heuchera sanguinea Splendens.....	1/8 oz.	1.20
Aubrieta graeca.....	1/8 oz.	.25	Incarvillea grandiflora brevipes.....	1/8 oz.	1.00
Aubrieta leichtlini, carmine.....	1/8 oz.	.25	Lavandula officinalis.....	1/4 oz.	.25
Aubrieta hybrids, new, large-fl.....	1/8 oz.	.25	Liatris pycnostachya, purple.....	1/8 oz.	.25
Aubrieta Whitewell Gem, dark purple.....	1/8 oz.	.25	Liatris scariosa, blue.....	1/8 oz.	.25
Bellis perennis Monstrosa, double, mixed.....	1/8 oz.	.50	Linum flavum, blue.....	1/8 oz.	.25
Bocconia cordata.....	1/4 oz.	.25	Linum perenne, blue, white.....	each per oz.	.25
Boltonia latissuama.....	1/4 oz.	.25	Lupinus polyphyllus atroviolacea.....	1/4 oz.	.30
Callirhoe involucrata.....	1/8 oz.	.25	Lupinus polyphyllus, blue.....	1/4 oz.	.30
Campanula carpatica, blue, white.....	each per oz.	.25	Lupinus polyphyllus carmineus.....	1/4 oz.	.30
Campanula medium calycanthema, dark blue, rose, white, mixed.....	each per 1/4 oz.	.30	Lupinus polyphyllus luteus.....	1/4 oz.	.30
Campanula medium, double, mixed.....	1/2 oz.	.30	Lupinus polyphyllus salmoneus.....	1/4 oz.	.30
Campanula medium, single, dark blue, lilac, rose, white, mixed.....	each per 1/2 oz.	.30	Lupinus polyphyllus Sunshine, yellow.....	1/4 oz.	.30
Campanula persicifolia Tolham Beauty, large-fl.....	1/4 oz.	.35	Lupinus polyphyllus, Russell hybrids.....	1/4 oz.	.35
Campanula pyramidalis, blue, white.....	each per 1/2 oz.	.25	Lupinus polyphyllus, mixed.....	1/4 oz.	.25
Campanula rotundifolia.....	1/8 oz.	.35	Lychnis haageana hybrids.....	1/4 oz.	.25
Candytuft gibraltaria, lilac.....	per oz.	.35	Lythrum salicaria roseum superbum.....	1/2 oz.	.35
Carnation, Chabaud's, cardinal-red, crimson, deep rose, white.....	each per 1/8 oz.	.30	Matricaria capensis, double, white.....	1/2 oz.	.25
Carnation Grenadin; Black King, Cardinal Red, Golden Sun, Golden Yellow, Rose Queen, Scarlet, Snow White, Triumph Pink, White Gold.....	each per 1/8 oz.	.65	Matricaria eximia, dwarf double Snowball.....	1/4 oz.	.35
Carnation Grenadin, mixed.....	1/8 oz.	.60	Myosotis alpestris, blue.....	1/4 oz.	.40
Carthamus tinctorius. Saffron Thistle.....	1/2 oz.	.25	Myosotis alpestris Blue Ball.....	1/8 oz.	.25
Catananche caerulea, white.....	1/2 oz.	.25	Myosotis alpestris, indigo-blue.....	1/4 oz.	.40
Centaurea gymnocarpa.....	1/2 oz.	.25	Myosotis alpestris messidor, late-fl., blue.....	1/8 oz.	.25
Centaurea macrocephala.....	1/4 oz.	.35	Myosotis alpestris robusta, large-fl., blue.....	1/8 oz.	.30
Centaurea montana, blue.....	1/2 oz.	.25	Myosotis alpestris, dwarf indigo-blue.....	1/8 oz.	.35
Cerastium biebersteini.....	1/4 oz.	.25	Myosotis dissitiflora, early blue.....	1/8 oz.	.40
Chelone barbata hybrids, mixed.....	1/2 oz.	.25	Myosotis palustris semperflorens.....	1/8 oz.	.25
Chrysanthemum indicum, double, mixed.....	1/8 oz.	.50	Nierembergia hippomanica.....	1/8 oz.	.75
Chrysanthemum indicum, single, mixed.....	1/8 oz.	.30	Platycodon mariesi, blue, white.....	each per 1/8 oz.	.75
Coreopsis lanceolata, large-fl., yellow.....	per oz.	.25	Poppy nudicaule, double, mixed.....	1/4 oz.	.35
Coreopsis lanceolata Mayfield Giant.....	per oz.	.25	Poppy nudicaule, Unwin's Giant Coonara, mixed.....	1/4 oz.	.35
Coreopsis lanceolata Sunburst, double, yellow.....	1/2 oz.	.25	Poppy orientalis, scarlet.....	1/8 oz.	.25
Dahlia, Coltness hybrids, mixed.....	1/4 oz.	.30	Poppy orientalis, mixed.....	1/8 oz.	.25
Dahlia Mignon, mixed.....	1/4 oz.	.25	Primula veris.....	1/8 oz.	.30
Delphinium Belladonna, improved.....	1/4 oz.	.60	Pyrethrum hybrid, atrosanguineum.....	1/4 oz.	.50
Delphinium Belladonna Cliveden Beauty.....	1/4 oz.	.55	Pyrethrum hybrid, James Kelway.....	1/4 oz.	.50
Delphinium, Blackmore & Langdon hybrids.....	1/4 oz.	.45	Pyrethrum hybrid, white.....	1/4 oz.	.35
Delphinium cardinale.....	1/4 oz.	.55	Pyrethrum hybrid, Robinson's Giant hybrids.....	1/4 oz.	.50
Delphinium, formosum, deep blue.....	1/2 oz.	.30	Rudbeckia purpurea.....	1/8 oz.	.25
Delphinium Iceberg, pure white.....	1/2 oz.	.40	Scabiosa caucasica, lilac.....	1/8 oz.	.25
Delphinium nudicaule, scarlet.....	1/8 oz.	.25	Scabiosa caucasica, white.....	1/8 oz.	.30
Delphinium, Pacific Giant hybrids.....	1/4 oz.	1.30	Sidalcea hybrids, mixed.....	1/8 oz.	.25
Delphinium Wrexham, hollyhock-flowered, mixed.....	1/4 oz.	.70	Sidalcea Rose Queen.....	1/8 oz.	.25
Dianthus deltoides, rose, Maiden Pink.....	1/4 oz.	.30	Silene schaffa.....	1/4 oz.	.30
Dianthus deltoides erecta, red.....	1/8 oz.	.65	Statice caspia, lilac.....	1/4 oz.	.35
			Statice dumosa.....	1/8 oz.	.25
			Statice latifolia.....	1/4 oz.	.30
			Strawberry Baron Solemacher, red.....	1/8 oz.	.35
			Thalictrum dipterocarpum.....	1/8 oz.	.60
			Tritoma, Pfitzer's hybrids, mixed.....	1/4 oz.	.30
			Valeriana, white.....	per oz.	.25

SEEDS

TREE — SHRUB — PERENNIAL  
FLOWER — VEGETABLE

SEEDS

Free catalog "Seeds for Nurserymen"

HERBST BROTHERS,

92 Warren St.,

New York 7, N. Y.



a built-up smooth asphalt roof. A vent is provided in the overhang on two sides of the cold-storage portion of the building to allow a free passage of air between the top of the insulation and the underside of the roof deck thus precluding any dry rot in the roof deck.

"The outside of the building is painted with a mixture of white Portland cement and lime which provides a white finish which is an integral part of the cinder block.

"The cinder blocks throughout this building were laid up in a full 3/4-inch bed of brick cement taking care that all joints were tooled both inside and out to preclude passage of moisture through joints.

"This building is cooled with one York 100 HW Freon water-cooled condensing unit, equipped with a 10-horsepower, 220-volt, 3-phase, 60-cycle motor and starter and one York Model LV-88, F-floor-type industrial conditioner equipped with a 3-horsepower, 220-volt, 3-phase, 60-cycle motor and starter. The necessary valves and controls for thermostatic operation are also provided. The proper temperature and humidity in this room are maintained by correct balancing of the condensing unit with the conditioner so that a temperature differential of about 8 to 10 degrees is maintained between the refrigerant and the desired room temperature and humidity. The proper temperature and humidity in any cold-storage plant can be arrived at only by the correct selection of refrigerating equipment for the size of the room to be refrigerated and the temperatures and humidities desired.

"After six months of operation the power, light and water bill for this storage has averaged about \$65 per month with an average occupancy of sixty-seven per cent.

"This building can be used successfully for purposes other than the storage of dormant seedlings. It is entirely adaptable to the storage of fruits, vegetables, furs and other commodities which can be stored at temperatures from 32 to 40 degrees or 50 degrees Fahrenheit. This can be done by readjusting the thermostatic controls on the refrigerating equipment for the desired temperatures. Necessary changes in humidity can be accomplished by changing the speed of the compressor motor."

**MARKHAM'S OHIO NURSERY**, Elyria, O., has purchased a section of the old Storrs & Harrison range, at Painesville, O., and will erect it at its Elyria nursery.

## MULLINS PLANT FARMS

410 Brookfield Ave., |Chattanooga 4, Tenn.

### STRAWBERRY PLANTS

Boysenberry, Thornless Boysenberry, Youngberry, Raspberry

Plants grown in east Tennessee are recognized by prominent plant authorities as the best to be had. To our knowledge this is the only large-scale plant-producing area where plants are grown on virgin soil.

You can't go wrong in choosing our plants.

We shall have the following varieties the coming season:

AROMA	DUNLAP	MARSHALL	TENNESSEE BEAUTY
BLAKEMORE	FAIRFAX	MISSIONARY	TENNESSEE SHIPPER
BRIGHTMORE	KLONDIKE	PREMIER	TENNESSEE SUPREME
CATSKILL	KLONMORE	SIERRA	

#### EVERBEARING VARIETIES

EVERMORE	GEMZATA	PROGRESSIVE	STREAMLINER
GEM	MASTODON	ROCKHILL	

Boysenberry, Thornless Boysenberry, Youngberry, Latham and Cumberland Raspberry.

PRICES QUOTED UPON REQUEST.

PLANTS OFFERED SUBJECT TO PRIOR SALE.

**MULLINS PLANT FARMS**, 410 Brookfield Ave., Chattanooga 4, Tenn.

All Inquiries and Orders from West of the Rockies should be sent to:

### BRENTWOOD BERRY GARDENS

140 S. Carmelina Ave., Los Angeles 24, Cal.

Exclusive Western Agent for MULLINS PLANT FARMS

We also offer Cameron Thornless Blackberry, Loganberry, Washington, Williamette, Sunrise, Cuthbert, Indian Summer, Lloyd George, Evans and Munger Blackcap, Sodus Purple Raspberry, Cherry Rhubarb, Paradise and M. Washington Asparagus.

A large nursery in the north, one of the oldest in the state, writes, "We were well pleased with stock purchased from you during the past two years, and would like to place our order for coming fall and winter with you." Other nurseries and growers have written in a similar vein.

Wholesale price list and catalog sent upon request as soon as ready.

**BRENTWOOD BERRY GARDENS**  
140 S. Carmelina Ave. Los Angeles 24, Cal.

#### SPRING IN TENNESSEE.

Glad that a strenuous shipping season is over and hoping that stock will be easier to obtain by the fall season, Henry N. Boyd, of the Boyd Nursery Co., McMinnville, Tenn., makes some comments on the spring season, as follows:

"We have just completed one of the hardest shipping seasons that our firm has had to endure. Even though our sales were good, our operating costs were higher than they ever had been.

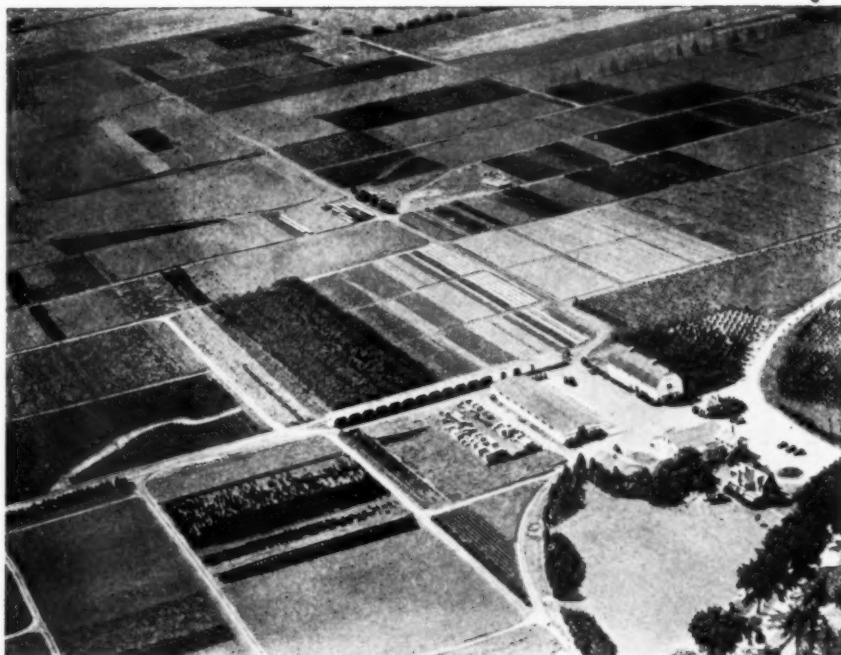
"Our planting season was fine for late plantings, and we did a fair amount of planting. The stock seems

to be starting off well, thanks to some good rains in May. It is our opinion that these May rains will affect the June-bud peach stands.

"The stands of peach seedlings in this section are much poorer than last year, and many of the growers were not able to bud as many peaches as they did last year."

H. J. GROOTENDORST, of F. J. Grootendorst & Son, Boskoop, Holland, has been on a business trip in Canada since May, with headquarters at Montreal. He will return to Holland the latter part of July.

# TWO WAYS TO BUY EVERGREENS



Aerial Picture of Hill's.

**1—THE HARD WAY—**You might begin by buying a section of the finest farm land available, building 30 modern greenhouses for propagating and maintaining this investment for 90 years while conducting an exhaustive research program in an effort to determine the best way of growing the Evergreens you need.

Yes, you might do all these things, but there's a better answer.

**2—THE EASY WAY —** Whether you need lining-out Evergreens for growing on in your own nursery or fully grown specimen stock for immediate use in landscaping, we invite you to take advantage of our outlined facilities and utilize our organization as your source of supply. **The D. HILL Nursery** works constantly to give you the best in **ORNAMENTAL EVERGREENS.**

## D. HILL NURSERY COMPANY

*Evergreen Specialists*

*Largest Growers in America*

DUNDEE, ILLINOIS

# New Devices and Equipment

## HOLE DIGGER.

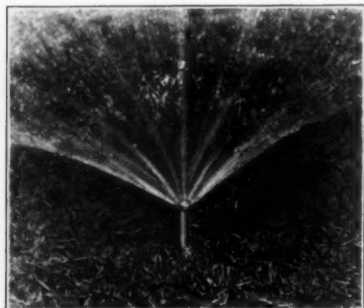
Designed for one-man operation, the Danhuser digger, made by the Danhuser Machine Co., Fulton, Mo., will dig 500 to 600 holes per day with no more effort on the operator's part than driving the tractor which tows it.

The digger, which can be used for planting seedlings, digging fence posts and foundation holes or for breaking frozen ground, is attached to the rear of the tractor and makes use of the internal hydraulic lift of the tractor, being raised and lowered by a control lever accessible to the driver. When the tractor is driven into position, the power take-off is put in gear and the hydraulic lift is lowered. The weight of the digger and its free-swinging attachment causes the auger to act as a plumb and assures a perpendicular position no matter what the position of the tractor.

All parts are steel fabricated. Tubular arms and welded construction give maximum strength and minimum weight. The standard auger is nine inches in diameter, but there are 4, 6, 10 and 12-inch models and a special 18-inch auger for setting seedlings. The digger reaches a maximum depth of forty inches. The unit extends sixty inches beyond the rear of the tractor. It is about sixty inches in height and weighs about 370 pounds. It is shipped in three pieces that are easy to assemble.

## DISAPPEARING SPRINKLER.

A disappearing lawn sprinkler head, the Periscope sprinkler, which operates on the pop-up principle, has been introduced by the Burklyn Co., Los Angeles, Cal. When the water is turned on, the head rises above the lawn surface to throw an even spray, as shown in the illustration; when the water is turned off,



Periscope Sprinkler.

the head drops below the surface of the grass. The grass can then be mowed without damage to lawn or mower. Unsightly holes are eliminated around sprinkler heads and the entire lawn surface is smooth.

Each Periscope sprinkler can be used for covering a full, half or quarter circle. When used for a full circle each head may be adjusted for fine or coarse spray, for the area sprinkled, or completely closed, without affecting other heads in the system. The change to half or quarter circle is made by inserting a spray direction sleeve. Installation of the sprinkler is generally on 12-foot centers or more, depending on water pressure and lawn layout, and can be accomplished easily on new or old sprinkler systems.

## TILLEX "31."

The Tillex "31," designed for use in truck gardens, orchards, home gardens, small farms and nurseries, reduces plowing, disking and harrowing to one operation. Tillex cultivation breaks and pulverizes the soil, creating a moisture retaining mulch and an ideal seedbed. The rotating plow steel blades dig forward, shredding and mixing soil, fertilizer and stubble to a width of seventeen inches, with cultivating depths adjustable from one to six inches. It is manufactured by the Bray Corp., Pasadena, Cal.

## TIN CAN CUTTER.

A can cutter developed and patented by the Verhalen Nursery Co., Scottsville, Tex., is being built in quantity for sales to nurserymen who grow and sell plants in tin cans of various sizes in Texas, California and other states. All those who have seen the machine are enthusiastic, says Steve Verhalen, secretary and sales manager of the company.

In a single simple operation the machine cuts four holes simultaneously in the walls of the tin can at the bottom rim. The can is placed in the top of the machine; the foot lever is pressed down and released, and the job is completed. If more holes are desired, the can is given one-eighth of a twist and punched again.

The cutting machine speeds up work on gallon cans, or the No. 10 size cans, about five times over the hand punch method. On larger containers it will do just as well or even better. The machine can be adjusted

to fit 1, 3 or 5-gallon cans. Adjustment is made with a pair of pliers and a screw driver in ten or fifteen minutes. Cutting blades for the machine are case hardened and will cut 75,000 or 100,000 cans. Parts for replacements are also available and may be obtained from the Verhalen Co.

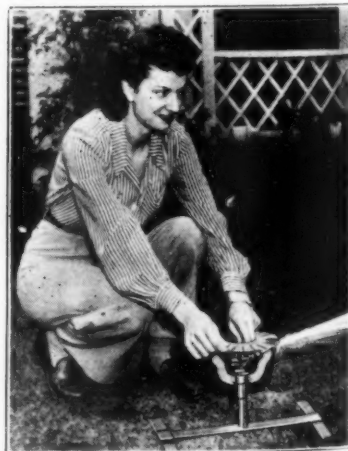
## PATTERN SPRINKLER.

A new garden sprinkler from which the water can be directed to cover any desired pattern was recently introduced by Rain Bird Sprinkler Mfg. Co., Glendora, Cal. The area sprinkled may be square, rectangular, circular or any combination of angles and curves, and the pattern sprinkler can be set to keep water off patios, trees, buildings or flower beds that project into the yard from any direction.

The distance water is thrown in each direction is controlled by adjustment of eighteen vanes in the plate above the sprinkler head. Each vane can be depressed, raised or twisted to direct the water any desired distance.

Successive vanes can be set to throw the stream progressively farther to reach into square corners, or depressed to keep spray off buildings or patios. The stream can be thrown as far as forty feet in one direction and held to a few feet in another.

This adjustment of the sprinkler is made by hand setting of each pliable aluminum vane. The action of the sprinkler is stopped with one hand while the vanes are adjusted. One type of sprinkler moves around a complete circle while the other makes any part of a circle and re-



Sprinkler Covers Desired Pattern.



# C. R. BURR & CO.

Announces the  
Introduction of the



## "AMERICAN FLAGSHIP ROSE"

—OFFICIAL FLOWER OF  
AMERICAN AIRLINES



Talk to the Man  
Wearing Badge  
33  
at Miami.

verses, for use at the side of gardens or lawns.

The sprinkler unit is an adaptation of heads used for many years in commercial irrigation and for large areas such as parks and golf courses. It covers a full circle in approximately one minute.

#### WEED BURNER MODELS.

The Hauck Mfg. Co., Brooklyn, N. Y., maker of oil and gas burners and other combustion equipment, has issued a booklet describing the various models of flame guns and their uses. Developed from a big industrial burner in which the firm has pioneered since 1900, the original weed burner for agricultural use was placed on the market in 1927. Today, models range from the 1½-gallon fuel capacity Little Giant to the new Double Hercules on wheels, of 12 to 30-gallon capacity. A versatile time and laborsaving tool, the flame gun produces a flat flame of 2,000 degrees Fahrenheit which can be used for such diverse jobs as burning weeds and other undesirable undergrowths, backfiring and strip burning, destroying grubs and insects, incinerating, charring, disinfecting, sterilizing, heating, melting and drying, and even for splitting rocks and boulders, so that it has found wide agricultural use.

#### ELECTRIC WEED CONTROL.

After three years of development, an electric weed-killing machine, using 12,000 volts of alternating current as the destroying force, capable of treating from ten to fifteen acres of weed-infested land a day, including deep-rooted perennials, without sterilizing the soil, or harming humans, animals or neighboring crops, is being manufactured by the Apco Corp., Los Angeles, Cal. The device was invented by Gilbert M. Baker, Mendota, Cal., while he was weed and insect control inspector in Platte county, Wyoming.

The apparatus consists of a 12.5 KVA gasoline-driven generator and a specially wound 12.5 KVA transformer mounted on a trailer. A pair of rakelike sets of electrodes, called Electrovars, connect to the trailer by means of a bus bar running alongside the trailer. The sets of electrodes are electrically bound to a seamless steel tubing connected to the transformer by means of a flexible conduit, and the whole electrical assembly is mounted on a special carriage made of welded square steel tubing.

In operation the apparatus is towed through a weed infestation, cutting a

7½-foot swath, and the electricity delivered through the electrodes kills the weed root and foliage on the surface of the ground. Complete control over the flow of electric current is provided through a control panel mounted in the towing tractor or jeep.

The Apco Corp. will offer this method of weed control to landowners through dealer-operators, now being selected throughout the country.

#### ALL-PURPOSE CART.

Built to support loads of up to 150 pounds and still light enough to be carried by a child is the little 2-wheeled "Mi-Chore-Cart," an all-purpose vehicle now being marketed by America's largest cart manufacturer, the National Cart Corp., Pasadena, Cal.

The cart is of all-steel tubular construction, with 6-inch steel disk wheels and a sturdy cargo platform mounted between solid steel axles. Attractively finished in light blue enamel, with white wheels, vital parts of the cart are cad-plated for protection against rust. An adjustable steel hook on the upright handle secures loads of varying shapes, sizes and heights, as shown in the illustrations below.



All-Steel Garden Cart.

#### NEW POWER MOWER.

A new power mower soon to be marketed under the trade name of the Roebbling rotary power mower was recently demonstrated by its manufacturer, John A. Roebbling's Sons Co., Trenton, N. J.

Completely new in principle and design, the new lawn mower will cut and trim a lawn in one combined operation and will cover one-half acre per hour. The machine's rotary action is similar to that of two electric fans placed side by side face down over the grass. The horizontal blades, whirling at high speed, reach to the edge of posts, trees, fences and other obstructions, eliminating after-trimming.

The machine is said to be able to cut all grasses or weeds, regardless of height, and will eliminate grass-matting and overlapping runs, since the wheels are placed behind and well inside the path of the cutting blades.

#### NEW CHEMICAL CONTROLS AZALEA PETAL BLIGHT.

The devastation of azalea petal blight, or flower spot, one plant disease which has defied all fungicides, can now be controlled through a method perfected by Dr. Cynthia Westcott, independent plant pathologist. In her work for the United States Department of Agriculture, Dr. Westcott discovered that one of the newer synthetic fungicides—developed for the control of early and late blight on potatoes—when combined with zinc, lime and an emulsifier, killed the fungus which ruined azalea blooms.

Investigations begun in 1933 brought no control of the disease until 1944, when the new organic chemical, Dithane, developed by Rohm & Haas Co., was first used on experimental plots near Spring Hill, Ala. Several varieties of azaleas were treated with Dithane, with adjoining plots left unsprayed to serve as a control for the test. Results were so gratifying that in 1945 the experimental program was extended to include Mobile and New Orleans. Results were conclusive that the new treatment controlled the fungus, and this year southern growers have made wide use of Dithane.

Dithane is an organic chemical known as disodium ethylene bis-dithiocarbamate. Local garden supply houses offer kits containing this fungicide and the chemicals with which it is blended to provide safe and certain control of azalea blight. Use of these kits is important because Dithane, if used alone, will possibly

# BIGGER CROPS START RIGHT HERE!



This inset photograph of the tiller mechanism, with hood removed, shows the revolving tines which break up and mix soil, fertilizer and organic matter to full tillage depth.

Built Only By  
Graham-Paige

## *...In Seed Beds Prepared by ROTOTILLER*

### POWER TILLER OF A HUNDRED USES!

No crop can be any better than the seed bed that feeds it. And no other type of tool can make seed beds as fine, as rich, and as moisture-conserving as this rotary tiller. Here are the reasons.

Only this modern method breaks up and pulverizes both soil and humus and mixes them so uniformly, making a rich mulch just as shallow or as deep as you want it.

It works in the driest, hardest soils, or in ground too gummy to yield to the plow. It makes a finer surface mulch, capable of absorbing and retaining moisture. It does all of this in one simple operation. Your Graham-Paige dealer will gladly explain the many additional uses, both with and without various specially-designed attachments, for ROTOTILLER—Power Tiller of a Hundred Uses.

**GRAHAM - PAIGE MOTORS CORPORATION**  
Farm Equipment Division • Willow Run, Michigan



injure azalea petals and does not provide outstanding control.

Early experiments established that azalea blight is caused by a fungus that lives in the ground from one season to another, developing in the damp weather which precedes the flowering season. Tiny spores blown up by the wind attack the bushes when buds first begin to show color. If untreated, the infection spreads quickly. Petals become spotted and collapse in a matter of hours, hanging wet and slimy from their stems. Instead of dropping normally, the brown ugly flowers hang on the bushes for months, finally falling to the ground, where the fungus remains dormant ready to repeat its attack next year.

To eradicate the fungus, blooms are sprayed with the Dithane as they open. Effective treatment calls for spraying about every other day until the flowering season reaches its peak, so that the spray will coat over and protect every petal. Early and late varieties, which develop fast, usually reach the peak of bloom in about three weeks, midseason varieties being slightly slower in opening.

#### FELL TREES WITH SHEARS.

Exerting jaw pressures up to sixty tons, commercial models of home-made tree shears are being offered by Memmoth Tree Shears Co., San Antonio, Tex. Attached to a crawler tractor, the improved shears cut anything from saplings to 30-inch trees at the rate of five a minute, the company asserts. Invented by Kirk Knight, Texas farm boy, the shears are actuated by the tractor's forward motion plus the tree's resistance against the apex of the blades, and can be adjusted for height. The company has set its production schedule at 150 a month.

#### SAFE STEPS FOR TRUCKS.

A safe, quick-acting folding step for use on motor trucks and trailers is being offered by the Safety Step Co., Los Angeles, Cal., to save time, accidents and fatigue.

Known as Saf-T-Steps, these steps can be installed with four bolts on the underside of the truck platform in about thirty minutes, with no alterations necessary to the body of the truck. All-metal, and built to support a weight of 1,000 pounds, they weigh only forty pounds. In closed position the steps fold under the truck bed. A simple, manually operated trip causes two sturdy 16-inch slip-proof steps to swing down and lock into



## ROSES AND JUNE-BUD STOCK



## PECANS GRAFTED AND SEEDLING TREES

Able and Useful Wholesale Nursery Service.

### ARP NURSERY CO.

Box 867

Tyler, Tex.

"Home of Better Rooted Trees"

#### Ornamental Trees, Shrubs and Evergreens

Write For Our Wholesale Trade List

**W.-T. Smith Corporation**  
Telephone 2689 GENEVA, N. Y.

position ready for use. A slight lift and push put them back in the closed position out of the way. Tread plates provide unusually secure gripping and are self-cleaning.

INSTEAD of a meeting, the Louisville Retail Nurserymen's Association was entertained by Herbert Bun-

#### CHARLES SIZEMORE Traffic Manager

319 1/2 Georgia St., Louisiana, Mo.

Loss and damage claims against railroad and express companies collected.

Freight bills audited.

Past due notes and accounts collected.

Well known to the nurserymen of the country.

Reference: Bank of Louisiana.

ton, Dan Gardiner and Grace Walker with a chicken dinner June 12 at Cox's lake, Anchorage, Ky.

# Through Passenger Service Designed to Meet INDUSTRY'S NEEDS



Here is a new passenger train service ideal for industrial executives making business trips between the East and West Coasts. This no-extra-fare service is 10 to 18 hours faster than previous service between Chicago-St. Louis and the West Coast terminals.

## Between NEW YORK-WASHINGTON, D. C. and LOS ANGELES-SAN FRANCISCO

From New York . . . through sleeping-cars depart on the New York Central and the Pennsylvania railroads. On arrival at Chicago they are carried through to Los Angeles on the Transcon; to San Francisco on the Overland.

From Washington, D. C. . . . through sleeping-cars departing on the Pennsylvania are carried through from Chicago to Los Angeles on the Transcon — to San Francisco on the Pacific. Departing on the Baltimore and Ohio, sleeping-cars are carried through to San Francisco on the Pacific.

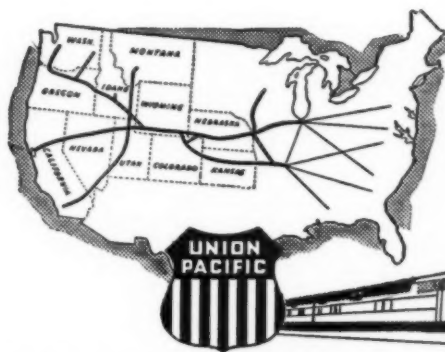
Similar service available eastbound from Los Angeles and San Francisco. No change of cars enroute in either direction.

## Between ST. LOUIS-KANSAS CITY-DENVER and PACIFIC COAST

Departing from St. Louis on the new Streamliner "CITY OF ST. LOUIS" through sleeping-cars are routed to Portland-San Francisco and Los Angeles (via Kansas City-Denver) with no change of cars enroute. Similar service is available eastbound from the West Coast.

For complete information regarding schedules, accommodations and other passenger service to or from the Union Pacific West, inquire at your local ticket office.

**TO VACATIONISTS...** Union Pacific serves more western scenic regions than any other railroad. These include California, Pacific Northwest, Colorado, Yellowstone and the National Parks of Southern Utah-Arizona.



be Specific -  
say "Union Pacific"



## UNION PACIFIC RAILROAD

ROAD OF THE *Streamliners* AND THE *Challengers*

# Plant Notes Here and There

By C. W. Wood

Followers of this column who have access to Thomas Hay's "Plants for the Connoisseur" will find excitement in the picture of *Mertensia horneri* on page 91. And if that does not do the trick, the accompanying notes surely will. It is to be hoped that Hay's recommendation will carry more weight than mine has during the fifteen years that I have known the plant.

It is all of fifteen years ago that plants of *M. horneri* came to me from the late D. H. Snowberger, of Payette, Idaho, a veteran collector of Idaho plants. They were an unimpressive lot of little, dried-up, black tubers which reached me in the fall and were consigned to a sunny plain in the rock garden without my having much hope of ever seeing them again. I forgot them, in fact, until the following spring, when soon after the passing of snow, I noticed exquisite pink buds dangling from 2-inch stems. A day or two later the stems had elongated another inch or so, each one carrying a cluster of the loveliest sky-blue bells that I have ever seen.

If you depend upon Hay for your cultural directions, you may disregard all his fussing about tenderness, because *M. horneri* is perfectly hardy in this climate (northern Michigan). I can understand that a plant as precocious as this one would be trying in the English climate and would need indoor (alpine-house) treatment, as he recommends. Here, where a plant is not coaxed into activity by mild winter weather, *M. horneri* stays underground until the snow leaves in spring and the temperature suits its performance. I found it not only hardy, but quite permanent in light soil on a sunny plain. I suspect, though, that it should be placed in a spot that is not watered after the plant goes to rest, for it really goes dormant, its tubers becoming hard little mummies. I regret that I cannot give a source of supply now that Mr. Snowberger has gone to his long rest, but nurseryman readers in the plant's range (Piper and Beattie describe it in their "Flora of Southeastern Washington and Adjacent Idaho") should be able to make it available.

## *Saxifraga Lingulata.*

The saxifrage which heads this paragraph was chosen, not because it is the best of the incrustated kinds, though it is a good one, but merely as a steppingstone to a few words

of praise for saxifrages in general and for the incrustated ones in particular. If you run a neighborhood nursery, you cannot afford to ignore the incrustated species, because you are missing many sales and you are also doing your clients an injustice.

You may not be able to grow all saxifrages (few in this climate can do much with the cushion or *Kabschia* section) but, with exception of *S. florulenta*, none of the incrustated section will offer difficult problems, providing two needs are supplied. Just as an example, there is a clump of *S. lingulata* in this garden that has been in the same spot for fifteen years without any attention. It never is irrigated, it never receives fresh soil, yet it keeps right on growing in size and beauty year after year. When these notes were written in June, it carried about a dozen arching sprays (indicating that I probably have variety *lantoscana* rather than the type) of white flowers over the foot-wide clump of silver-incrustated leaves. It grows on a flat surface under an open-headed apple tree, where it is quite shaded during the middle of the day and is exposed to three-fourths sun in morning and evening. If the soil were heavy, that would not do at all; rather *S. lingulata* then would be put in an east wall, or similar exposure, in the well drained soil of which rock gardens are usually made. Good drainage in a limy soil and

protection from the blistering mid-day sun are about all we of eastern and midwestern states have to look to in the culture of these plants.

*Lingulata* has varied into several forms, according to the books, but not many are available at present in this country. I have found *S. lingulata alberti* in one catalog. As I remember it from trials about ten years ago, it is about the best of the lot, with large rosettes for a *lingulata* and the flowers larger and more spreading inflorescences. Variety *lantoscana*, listed by an eastern dealer, is one of the better forms that I have grown, especially when judged from the flowering angle. One catalog lists variety *superba* as having fat little rosettes, heavily incrustated, and graceful plumes of white flowers. That sounds interesting and should be worth while. But of that I cannot say. The only form carrying the term *superba* was a large-flowered *lantoscana* that I had years ago and later sold. A Vermont grower lists *S. lingulata bellardi*, but as *bellardi* is a synonym of *lingulata*, that does not tell me anything. Rest assured, though, that any form of this saxifrage that you get probably will please both you and your clients. Propagation is quite rapid from division of the clumps.

## *Perovskia Atriplicifolia.*

A combination of pretty blue flowers in late summer (August and Sep-

## HEADQUARTERS

for

# G. P. M. PEAT MOSS

# DRICONURE

an all-organic fertilizer that  
combines animal manures with  
peat moss

## ATKINS & DURBROW, INC.

165 John Street  
BOSTON

CHICAGO

New York 7, N. Y.  
DETROIT





# Periscope SPRINKLER HEADS

disappearing

Improved, "pop-up type" sprinkler heads that really work, in old or new lawn sprinkler systems. Operate on 12' centers or more, depending on water pressure. Can be used for full, half or quarter circle spray. Save Time, Water and Work. Only Periscope Disappearing Sprinklers include all these features:

## 1. Action is Automatic

When water is turned ON, Periscope Head pops up above lawn level, for smooth even spray. When water is turned OFF, head drops out of way of lawn mower.

## 2. Individual Adjustment

When used for full circle, each Periscope can be adjusted for fine or coarse spray, and for area covered, by turning cap on sprinkler.

## 3. Full, Half or Quarter Circle

Only one model needed for any installation. Adjustment is quickly, easily made for half or quarter circle, by insertion of Spray Direction Sleeve... before or after installation.

## 4. Riser Tube Won't Drop Through

Ring at upper end of riser tube prevents tube dropping through Periscope body if cap is removed.

## 5. Out of Way of Mower

Lawn can be mowed without possible damage to mower. No bumps, no unsightly holes.

## 6. Uses Less Water

Individual adjustment of Periscope Heads keeps lawn evenly sprinkled without wasting water.

## 7. Sprinkler Won't Turn

Groove in riser tube holds Periscope Head in position against water pressure - won't turn or get out of position.

## 8. Can't Clog

Grass and dirt doesn't collect on beveled, hexagonal body of Periscope - can't get into head to clog sprinkler.

## 9. Easily Installed

Hexagonal heads fit standard half-inch risers of lawn sprinkler systems - easily installed for old or new lawns.

MANUFACTURED BY

**BURKLYN**

*Company*

3429 Glendale Boulevard  
Los Angeles 26, California

Write for Information Regarding Sales and Distribution

tember here, where it blooms on new growths after its annual killing back to the ground), lovely gray-blue foliage and an ability to get along in quite poor soil, so long as it is well drained and in the sun, should make the central Asian *Perovskia atriplicifolia* a popular plant. It is a labiate, closely allied to the sages, and has the aromatic foliage of so many of the latter. With all its good points, it is surprising to hear that it has made so little headway in gardens, especially in view of the fact that it has been in this country a long time (I recall seeing it in the east more than thirty years ago) and has been listed by some of the larger nurseries for a score of years or more.

The books tell us it is a shrub growing to five feet in height; here, where it acts as an herb, it seldom exceeds eighteen inches. It would be especially good in warmer sections where it could maintain its shrubby growths and produce long graceful spikes of silvery-blue flowers; it is useful for cutting even this far north, not only because of its color and type of inflorescence, but also for its summer flowering period.

#### Garden Pictures, No. 2.

This picture I found in an amateur's garden last year—a picture the result of trial and error during the past ten years. It pleased me so much that I made careful notes of its composition, little thinking that I should find a use for the information so soon. It may be said parenthetically that these observations need not be taken as iron-clad procedures. On the other hand, they are meant more as suggestions for the working out of pleasing plant combinations.

The landscape I have in mind now had a long sweep of Pacific hybrid delphinium in the Galahad series (white) in front of a background of evergreen plantings for the entire picture. That made a pleasing sight in itself. Then *Eryngo* in the bluest form you can find was added in like drifts. This planting used what the gardener bought for *Eryngium amethystinum*, but more likely was *E. planum*. In any event, the blue heads and stems of the *eryngiums* rising through clouds of *gypsophila* were a pleasing addition and were further set off by groups of *Phlox Mary Louise* and *Antonin Mercier*. Incidentally, if you have never made the acquaintance of *Mary Louise*, you have missed the best white *phlox* to date, according to my judgment. Although taller than *Mrs. Jenkins*, it is not a tall *phlox*, but it is a good grower, has foliage as good as or better than the average *phlox* and is a

## EVERGREENS

### Balled and Burlapped

*Juniper Scopulorum*, grafted

*Juniper Virginiana*, grafted

Pines, Spruces, Firs

## EVERGREEN LINERS

*Savins*, *Pfitzers*, *Prostrates*, *Junipers*,

Pines, Spruces, Firs

Also a general line of fruit, shade, ornamental trees and shrubs.

## THE PLUMFIELD NURSERIES

Fremont, Nebraska

## THE CLASSEN CO.

Growers of quality stock with quality roots.

1. Straight American Elm and Hackberry.

1½ to 3-inch caliper.

2. Chinese Privet Seedlings and Transplants.

All sizes up to 4 feet.

3. Grapevines in assorted varieties. 1 and 2-year plants.

Featuring that good "EXTRA" variety for the southwest.

4. One-Year Red Cedar Seedlings.

5. Assorted Seedlings and Lining-out Stock.

Ask for advance quotations. Our wholesale list will be ready about September 1, 1946.

## THE CLASSEN CO.

301 Terminal Building

Phone 3-8301

Oklahoma City 2, Okla.

1870

1946

## "LAKE'S"

## SHENANDOAH NURSERIES

Shenandoah, Iowa

One of the Midwest's best sources of  
GENERAL NURSERY STOCK

Including —

Ornamental Shrubs      Fruit Trees      Vines  
Shade Trees      Forest Tree Seedlings  
Splendid Field-grown CHRYSANTHEMUMS AND PHLOX

We Solicit Your Inquiries



POTTED PLANTS



HEAVY CARTONS



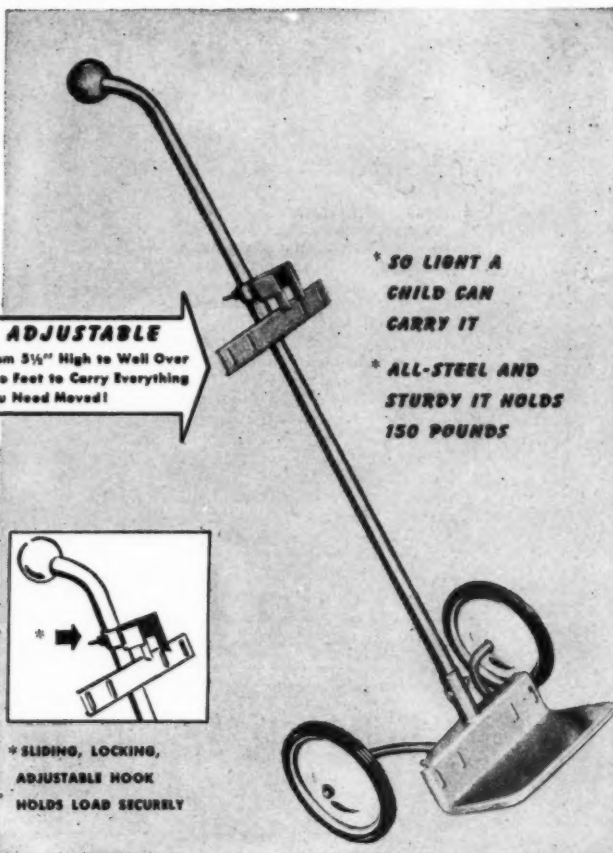
SHOPPING NET BAGS



TRASH REMOVAL



TRUNKS &amp; BAGS

**ADJUSTABLE**

From 5 1/4" High to Well Over  
Two Feet to Carry Everything  
you Need Moved!

\* SO LIGHT A  
CHILD CAN  
CARRY IT

\* ALL-STEEL AND  
STURDY IT HOLDS  
150 POUNDS



\* SLIDING, LOCKING,  
ADJUSTABLE HOOK  
HOLDS LOAD SECURELY



BRICK OR TILE



SHOPPING BAGS



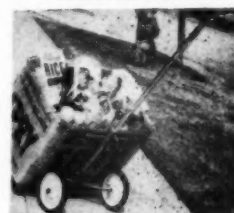
SHOPPING BASKET



GARBAGE CANS



GARDEN FLATS



CARRY TO MARKET OR STORE • WHEEL IT HOME!

Here's the **ONE CART** Everybody Wants

# Mi-Chore-Cart

PERFORMS EVERY HOUSEHOLD, MARKET AND GARDEN CHORE

## WIRE YOUR ORDER

Standard Discounts—  
100,000 "Now" Rolling  
from Production Lines.  
Packed 6 Per Carton.  
Weight Each 5 lbs. 3  
oz. Weight Per Carton  
40 lbs. Orders Filled in  
Order Received Subject  
to Receipt of Sample.

Designed and made by America's leading wheeled goods and cart manufacturer, Mi-Chore-Cart happily provides Mrs. America with the answer to her every moving problem. Sturdy all-steel, in gleaming rust-proof metal and enamel finish, adjustable to every height for every type of household, market and garden use, Mi-Chore-Cart easily picks up and wheels a thousand burdens on its real rubber tires. In the house, in the garden—to and from the market it goes—and, best of all, it takes but little standing room in closet, hall or service porch—or it may be hung from a convenient hook. Over 3 feet high, 14" wheelbase, solid steel axles, contoured steel white enamel wheels and 6" rubber tires, unbreakable steel tubing.

**\$6.95 ea.**

SUGGESTED RETAIL PRICE

NATIONAL

*Cart*

CORPORATION

AN AFFILIATE OF Burhans & Associates • 234 E. Colorado St. Ryan 16543 Pasadena 1, Calif.



good producer of large white flowers in large trusses. Again, Antonin Mercier, although an old, old variety, is not easily beaten in its color class. Usually described as lilac or lilac-blue in catalogs, it is nearer lavender as it performs in gardens, especially in sun. Anyway, it was an excellent adjunct to the picture made by this planting. The gardener tells me he is trying Katherine, light lavender with a white center, this year. I do not know Katherine, but Blue Boy, a dark blue in part shade that fades to lavender-blue in the sun, would probably do equally well. Then there is Royal Purple that might work, though I have little liking for its shade after fading.

Eryngiums are used in several associations in this garden, mostly with good effects. One that I like especially well is the blue, or rather gray-blue, of a special eryngo with the brilliant scarlet of *Penstemon torreyi*. I have often wondered why makers of landscape pictures do not use eryngiums more freely. They are so reliable and so useful that they could be used by the hundreds where they are entirely unknown. It is quite useless to depend upon names when buying them, because seedsmen and nurserymen have paid no attention to their nomenclature for so long that the confusion is now beyond repair. The best way to lay in a foundation stock is to see the plants before buying and then select the ones that appeal to you. They come in various shades of blue and a wide range of heights from fifteen inches to three or four feet. There are several brilliantly colored hybrids in addition to the species. Named forms and selected seedlings may be propagated from root cuttings after the usual schedule for that class of work.

#### Arenaria Stricta.

I can understand why *Arenaria verna* is such a popular plant in sections where it can be used without the burning of foliage, but why it is almost universally popular is not so easy to comprehend. At its best it is a lovely mossy thing; at its worst, when the center of the plant is burned leafless by hot sun, there are few plants more unbecoming to a garden's looks. But that is not what I started out to talk about, although it is a fitting introduction to another sandwort, *A. stricta*, which has never sunburned in this garden, where *A. verna* is a problem in sunny spots.

*Arenaria stricta* is native to eastern North America, being found over a wide range extending from New Hampshire to Minnesota and southward in the east to South Carolina. There is also a variety, *texana*, which

## SPECIMEN EVERGREENS

Well sheared and root-pruned.

All orders for Spring delivery dug in rotation according to booking.

Juniper Virginiana	3 to 11 ft.
Juniper Virginiana Canadensis	3 to 5 ft.
Juniper Virginiana Elegantiissima	18 to 48 ins.
Juniper Chinensis, Compact	2 to 4 ft.
Juniper Chinensis Keteleeri	3 to 5 ft.
Juniper Chinensis Pfitzeriana	15 to 48 ins.
Juniper Sabina	18 to 36 ins.
Juniper Sabina Von Ehron	18 to 36 ins.
Juniper Sabina Von Ehron, Globes	12 to 30 ins.
Juniper Scopulorum	2 to 5 ft.
Juniper Scopulorum Pathfinder	30 to 48 ins.
Juniper Scopulorum Gareii, Globes	18 to 36 ins.

CARLOADS OUR SPECIALTY.

Chinese Elm, 6 ft. to 4-in. Caliper.

General Assortment of other Evergreens, Shade Trees, Shrubs and Fruit Trees.

## SNEED NURSERY CO.

P. O. Box 798

Oklahoma City 1, Okla.

## LINING-OUT SHRUBS and EVERGREENS FALL 1946 — SPRING 1947

All orders booked subject to crop.

	Per 100	Per 1000
Black Hills Spruce, 2 to 3 ins., 2-yr. sdgs.	\$4.00	\$30.00
Blue Spruce, 2 to 3 ins., 2-yr. sdgs.	4.00	30.00
Douglas Fir, 2 to 3 ins., 2-yr. sdgs.	3.00	18.00
Douglas Fir, 3 to 6 ins., 2-yr. sdgs.	4.00	30.00
White Pine*, 2 to 3 ins., 2-yr. sdgs.	3.00	15.00
White Pine*, 3 to 6 ins., 2-yr. sdgs.	4.00	20.00
Balsam Fir, 2 to 3 ins., 2-yr. sdgs.	3.00	20.00
*Federal Inspection. Can ship interstate into most states.		
Aronia arbutifolia, sdgs., 1-yr.	4.00	25.00
Aronia melanocarpa, sdgs., 2-yr.	5.00	45.00
Barberry thunbergii, sdgs., 1-yr., 3 to 6 ins.	3.00	12.00
Barberry thunbergii, 6 to 8 ins., 2-yr.	4.00	25.00
Buckthorn cathartica, 1-yr., 4 to 6 ins. up.	4.00	25.00
Buckthorn frangula, 1-yr., 4 to 6 ins. up.	4.00	30.00
Cornus sibirica, 6 to 12 ins. up, cigs.	6.00	50.00
Cornus flammula, 6 to 12 ins., 2-yr.	7.00	
Cydonia japonica, 1-yr., sdgs.	6.00	
Cydonia pygmaea, 1-yr., sdgs.	7.00	
Deutzia gracilis, 2-yr., trans.	9.00	

Deutzia Prada of Rochester, 1-yr., cigs.	\$5.00	
Forsythia intermedia, 2-yr., trans.	6.00	
Forsythia spectabilis, 2-yr., trans.	7.00	
Honeysuckle bella alba, 1-yr., cigs.	5.00	45.00
Honeysuckle bella rosea, 1-yr., cigs.	5.00	
Honeysuckle morrowi, 1-yr., cigs.	5.00	45.00
Honeysuckle zabelii*, 1-yr., cigs.	6.00	
Philadelphus grandiflorus, 1-yr., cigs.	5.00	45.00
Philadelphus Bouquet Blanc, 1-yr., cigs.	6.00	50.00
Philadelphus Bouquet Blanc, 2-yr., cigs.	7.50	
Physocarpus opul. aureus, 1-yr., cigs.	6.00	
Physocarpus opul. nanus, 1-yr., cigs.	7.00	
Privet, Amur River, 2-yr., cigs., trans.	3.50	30.00
Privet, Itoha, 2-yr., cigs., trans.	3.50	30.00
Privet, Regal (true from cigs.), 2-yr.	5.00	45.00
Spiraea froebelii, 1-yr., cigs.	5.00	45.00
Spiraea billardi rosea, 1-yr., cigs.	5.00	45.00
Spiraea trichocarpa, 1-yr., cigs.	6.00	
Spiraea vanhouttei, 1-yr., cigs.	5.00	45.00
Viburnum opulus stierlii, 1-yr., trans.	8.00	

\*\*In general assortment. Only limited quantity.

Cash with order please.

SCOTCH GROVE NURSERY

Scotch Grove, Iowa

## TILLMAN-EAKINS NURSERY

★

Wholesale and Retail

★

R. R. 2

Newburgh, Ind.

**J & P**

EVERGREENS  
SHADE TREES

SHRUBS, VINES  
HEDGE PLANTS, etc.

In good assortment.

**Jackson & Perkins Co.**  
NEWARK, NEW YORK STATE

# To Get the Cream of the Business

... from farmers



... from livestock raisers



... from poultry raisers



... from gardeners



... from householders



... from commercial establishments



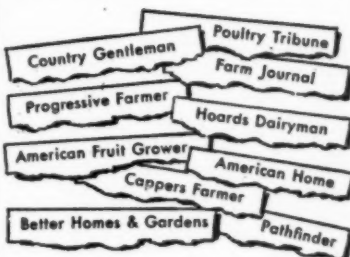
## Plan ahead with HUDSON

### Cash in on HUDSON Consumer Acceptance



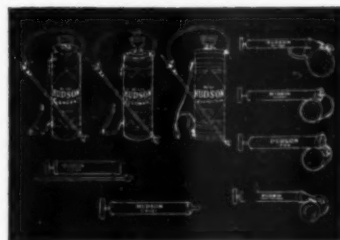
The "Diamond-H" on Hudson Equipment is the mark of widespread acceptance—the mark of the brand favorably known to most of your customers—accepted by them as the best value in the field.

### Cash in on HUDSON Multi-million Advertising



Thirteen leading national magazines—13 leading regional magazines—carry 7½ million HUDSON messages a month—90 million for the current campaign selling your best prospects.

### Cash in on HUDSON Basic Inventory Plan



The soundest dealer plan in years—basic inventories of product lines that eliminate "lazy" investment dollars—cut losses on slow movers—assure fast, profitable turnover.



**Tested and Proved**  
SPRAYERS AND DUSTERS  
MAY TOOLS AND BARN EQUIPMENT  
LIVESTOCK EQUIPMENT  
FARM VENTILATION EQUIPMENT  
POULTRY EQUIPMENT

COPYRIGHT 1946, H. D. HUDSON MFG. CO.

Be the dealer in your community who makes the extra profits assured by sound planning. Be the dealer who sells equipment of proved acceptance, backed by aggressive, sales-making promotion. Select the HUDSON line for steady sales and bigger profits—now and for the LONG PULL.

H. D. HUDSON MANUFACTURING COMPANY, 589 E. Illinois Street, Chicago 11, Illinois  
Branches in Principal Cities in the United States.

© 1946 H. D. H. MFG. CO.



TESTED AND PROVED SPRAYERS AND DUSTERS FOR EVERY USE, EVERYWHERE

the floras ascribe to the southwest. I did not mean to imply in the preceding paragraph that the two plants can be made to serve exactly the same purposes; in fact, that is far from the truth. *A. stricta* is fitted for entirely different uses, its diffusely spreading, leafy stems to a height of three or four inches producing airy effects of which *A. verna* is entirely incapable. That tuft of emerald is a beautiful ornament throughout the year, but the crowning glory of the plant comes during the six weeks or more in early summer, when it is studded with little white stars. And if it is cut over as soon as the first flowering period has passed, it may be induced to repeat the performance again in late summer, though usually on a reduced scale.

According to experience here and to the reaction of visitors, this native should find ready acceptance among gardeners who have advanced beyond the stage where showiness is demanded of every plant. If I have made my description plain enough, experienced growers will be able to picture many uses for the plant. All that is needed to complete the plant's story is to add that it does well in sun or part shade and that it needs no coddling to keep it contented with ordinary garden conditions. It is easily grown from seeds or cuttings.

#### Garden Heliotrope.

Garden heliotrope, *Valeriana officinalis*, may be a quite spectacular object or it may be just another plant, depending upon the way it is treated. Because it is usually mistreated and is therefore "just another plant," is no doubt one reason why it is not seen more often. It may be, too, that modern gardeners do not know how to handle it. May I suggest that you make a planting of it in your show garden, using a deeply trenched, rich soil where the hose will reach? When your clients see the results, vigorous 4-foot plants filling the air with pleasing fragrance, instead of the usual half-starved nondescript weeds they are used to, you will want stock to fill the demand. The result of high culture might surprise you, too, if you are only familiar with the plant under ordinary treatment.

E. E. CHATTIN, of the Southern Nursery & Landscape Co., Winchester, Tenn., has been in the hospital, and until he is able to be back attending to business in another month, H. M. Templeton, vice-president, is holding the fort, though he is not ordinarily active in the business. E. W. Chattin, president of the company, died in February.

#### APPROVED TRAINING.

Veterans may now obtain an approved correspondence course in landscape gardening under public law 346 (GI bill of rights). This makes it possible for the returned veteran to study a qualified course of instruction and still occupy a full day-time job. By this new arrangement technical education and guidance are made available to veterans in outlying districts. Further, it is an ideal arrangement for the veteran who has gone into business for himself in the landscaping or nursery field.

This correspondence course in landscape gardening and horticulture will also fit into the apprenticeship training program because it provides a supervised educational program which many nurserymen are neither equipped nor have time to prepare. This approved course in landscape gardening and horticulture is that given by the National Landscape Institute, Los Angeles, Cal.

Though this approved training is one specializing in design and plant selection, sufficient information on horticulture is included to prove of value in the development of a well rounded perspective in the minds of those enrolled. A practical design problem is included that is based on the needs of property chosen by the trainee for the project.

#### REORGANIZE OZARKS FIRM.

The Ozarks Plant Farms, Inc., Springfield, Mo., was reorganized in March of this year. C. Burton Fox, original president and general manager, sold his interests to A. B. McCoy.

The corporation has under lease for a term of years thirty-seven acres, part of which is planted to nursery stock; the balance will be developed from year to year. A new storage building is being erected on the property for the handling of roses, an item sold at wholesale. No wholesaling is done on other stock, as it is grown exclusively for use in landscape work and yard sales. The organization is handling some excellent contracts in landscape work and expects to be busy during the summer months on grading and getting lawns ready for seeding during the early fall months.

M. (Mack) Semple, well known to the nurserymen throughout the United States, is general manager of the organization.

BILL MICHEL has opened the West Side Evergreen Nursery at Erie, Pa.

## ADVANCE OFFER OF SHRUBS

Now is the time to buy your shrubs for fall and winter delivery

#### AMUR RIVER SOUTH PRIVET —LIGUSTRUM SINENSE.

	Per 100	Per 1000
4 to 6 ins., adigs. ....	\$0.75	\$ 7.50
6 to 12 ins., adigs. ....	1.00	10.00
12 to 18 ins., adigs. ....	1.50	15.00
18 to 24 ins., adigs. ....	2.00	20.00
12 to 18 ins., br., adigs. ....	2.50	25.00
18 to 24 ins., br., adigs. ....	3.50	35.00
2 to 3 feet, br., adigs. ....	4.50	45.00

#### AMUR RIVER NORTH PRIVET —LIGUSTRUM AMURENSE.

L. O. Rooted C. ....	2.00	17.50
6 to 9 ins., 2 br. ....	2.50	20.00
9 to 12 ins., 2 br. ....	3.50	30.00
12 to 18 ins., 2 br. ....	4.50	40.00
12 to 18 ins., 3 br. and up	5.50	50.00
18 to 24 ins., 2 br. ....	5.50	50.00

#### CALIFORNIA PRIVET —LIGUSTRUM OVALIFOLIUM.

L. O. Rooted C. ....	2.00	15.00
6 to 12 ins., 2 br. ....	2.50	20.00
12 to 18 ins., 2 br. ....	3.50	30.00
Grafting grade ....	3.50	30.00
12 to 18 ins., 3 br. and up	4.50	40.00
18 to 24 ins., 2 br. ....	4.50	40.00

#### SPIRAEA VANHOUTTEI, 1-year Cuttings.

Rooted Cuttings, L. O. ....	2.50	20.00
6 to 12 ins., L. O. ....	3.00	25.00
12 to 18 ins., L. O. ....	4.00	35.00
9 to 12 ins., hedging gr. ....	4.00	35.00
12 to 18 ins., hedging gr. ....	6.00	50.00
18 to 24 ins., hedging gr. ....	8.00	70.00

#### DEUTZIA, PRIDE OF ROCHESTER AND CRENATA

Rooted Cuttings, L. O. ....	2.00	17.50
6 to 12 ins., L. O. ....	2.50	20.00
12 to 18 ins., L. O. ....	3.00	25.00
18 to 24 ins., L. O. ....	4.00	35.00
12 to 18 ins., br. ....	4.50	40.00
18 to 24 ins., br. ....	6.50	60.00

#### ABELIA GRANDIFLORA, 1-year field-grown cutting.

Rooted Cuttings ....	6.00	50.00
4 to 8 ins. ....	7.00	60.00
8 to 12 ins. ....	8.50	75.00
12 to 16 ins. ....	10.00	90.00

#### SYMPHORICARPOS VULGARIS —Coralberry.

Rooted Cuttings, L. O. ....	2.00	15.00
6 to 12 ins., L. O. ....	2.50	20.00
12 to 18 ins., L. O. ....	3.00	25.00
12 to 18 ins., br. ....	5.00	40.00
18 to 24 ins., br. ....	7.00	60.00

#### SPIRAEA THUNBERGI, 1-year cuttings.

Rooted Cuttings, L. O. ....	3.00	25.00
6 to 12 ins., L. O. ....	3.50	30.00
12 to 18 ins., L. O. ....	4.50	40.00
12 to 18 ins., hedging ..	6.00	50.00
18 to 24 ins., hedging ..	7.00	60.00
18 to 24 ins., br. ....	10.00	90.00
2 to 3 ft., br. ....	12.50	110.00

#### WEIGELA PINK, 1-year cuttings.

Rooted Cuttings, L. O. ....	3.50	30.00
6 to 12 ins., L. O. ....	4.00	35.00
12 to 18 ins., L. O. ....	5.00	45.00
18 to 24 ins., L. O. ....	6.00	55.00

We are in position to book orders at the prices quoted above. Our supply is limited for the coming shipping season, but we will book orders at these prices until our supply is exhausted or until our new list is printed.

At this time we are in position to furnish a fair quantity of Forest Tree Seedlings and Fruit Trees. Be sure to send us a list of your requirements and we shall be pleased to quote on them, as we are having a good growing season and plants are making fine growth.

**Boyd**  
NURSERY COMPANY

McMinnville, Tenn.



# WHOLESALE TRADE LIST

Fall 1946 — Spring 1947

## WHOLESALE ONLY

To the trade we offer the following varieties of Small Fruit Plants and Vegetable Roots for delivery any time after the stock becomes dormant. All prices are F.O.B. Bridgman, Mich., boxing at cost, 250 at 1000 rate.

### GRAPEVINES

	25 to 100	100 to 250	250 and up
	Each	Each	Each
Concord, 2-1	\$0.10	\$0.09	\$0.08 1/2
Concord, 1-1	.08	.07	.06 1/2
Fredonia 2-1	.12	.11	.10 1/2
Niagara 1-1	.09	.08	.07 1/2
Catawba			
Delaware, 2-1	.14	.13	.12 1/2
Delaware, 1-1	.11	.10	.09 1/2
Caco, 2-1	.16	.15	.14 1/2
Caco, 1-1	.12	.11	.10 1/2

### CURRENTS

	25 to 100	100 to 250
	Each	Each
Wilder, 2-1	\$0.15	\$0.14
Wilder, 1-1	.11	.10

### RED RASPBERRIES

	1-yr., No. 1, 3/16-in. to 1/4-in.	100 to 1000
	100	1000
Latham	\$6.00	\$50.00
Indian Summer	6.50	55.00
Chief	5.00	45.00
St. Regis	5.00	44.00
All transplants of above \$10.00 higher in price.		

## VEGETABLE ROOTS

### VICTORIA RHUBARB—

#### Whole Roots

	100 to 250	250 to 1000	1000 to 5000
	Per 100	Per 100	Per 1000
1 1/2-in. and up	\$10.00	\$9.50	\$90.00
1 to 1 1/2-in.	6.00	5.50	50.00
3/4 to 1-in.	5.00	4.50	40.00
1/2 to 3/4-in.	4.00	3.50	30.00

### RED RHUBARB DIVISIONS

	Each
Canada Red	\$0.40
McDonald	.30

### BLACK RASPBERRIES

	No. 1 Tips	100	1000
Cumberland, Logan	\$4.50	\$35.00	
Morrison	6.00	50.00	

### PURPLE RASPBERRIES

	No. 1 Tips	100	1000
Sodus, Potomac	\$ 6.00	\$50.00	
No. 1 Transplants	10.00		

### BLACKBERRIES

	No. 1 R. C.	100	1000
Eldorado, Alfred	\$4.50	\$35.00	
No. 1 Transplants	5.50	45.00	

### LUCRETIA DEWBERRY

	No. 1 tips	100	1000
	\$4.50	\$35.00	

### BOYSENBERRY

	No. 1 Tips	100	1000
Common and Thornless	\$6.50	\$55.00	

### BLUEBERRIES

	Each
Rubel, Rancocas, Jersey, 1-yr., 3 to 6 ins.	\$0.25
Rubel, Rancocas, Jersey, 2-yr., 6 to 12 ins.	.60

### ASPARAGUS

	25 to 100	100 to 250	250 to 1000
	Per 100	Per 100	Per 1000
Washington, 2-yr.	\$3.00	\$2.50	\$20.00
Washington, 1-yr.	2.50	2.00	15.00
Paradise, 2-yr.	3.25	2.75	22.50
Paradise, 1-yr.	2.75	2.25	17.50

### HORSE-RADISH

	25 to 100	100 to 250	250 to 1000
	Each	Per 100	Per 1000
Cuttings	\$0.02	\$1.75	\$15.00
Whole Roots	.04 1/2	4.00	35.00

Wire or telephone Bridgman 22

ASK FOR SPECIAL QUOTATIONS ON QUANTITY

Orders will be accepted from this list for delivery any time after stock is dormant, which normally is about October 15 until end of season.

TERMS: 5 per cent discount for cash with order. 2 per cent discount for payment upon receipt of stock to parties with established credit; or 10 days net. Orders amounting to less than \$5.00, cash with order. C.O.D. orders must be accompanied with 1/3 cash deposit.

**KRIEGER'S WHOLESALE NURSERY, Bridgman, Michigan**

# WHOLESALE PRICE LIST

Established 1887  
by J. H. H. Boyd

Our 59th Year

## FOREST NURSERY CO.

## McMINNVILLE, TENNESSEE

J. R. Boyd, President

Telephone 234W

SPECIAL CONVENTION LIST of a few items we will have for next season. Grades offered are subject to how stock makes up by digging time. Regular fall list will be mailed in September, offering complete list of what we will have to offer, including Evergreens, Hardy Shrubs, Hedge Plants, Ornamental and Shade Trees and Fruit Trees. All stock of first-class quality and up to grade. Orders accepted subject to any injury or loss from causes beyond our control. We are careful to keep varieties labeled true to name and will replace, on proper proof, any stock that may prove otherwise, free of charge, or refund the purchase price, but it is mutually agreed that we shall not be liable for any amount greater than the purchase price paid us.

No claims will be considered unless made in writing within ten days after receipt of goods.

TERMS AND CONDITIONS: Three per cent (3%) discount and free packing for cash with order; two per cent (2%) ten days, or 30 days net from date of invoice. Open accounts to those with approved credit ratings. Twenty-five per cent (25%) cash required before shipment on C.O.D. orders. Packing charges at cost on open account and C.O.D. orders.

Will be glad to quote your want list. Special prices on carload lots.

WHOLESALE ONLY—NOTHING SOLD AT RETAIL

VISITORS WELCOME

## HARDY DECIDUOUS FLOWERING SHRUBS

S.—Seedlings; C.—Rooted Cuttings; Tr.—Transplanted; Br.—Branched; L.O.—Lining-out; Div.—Divisions.

ACANTHOPANAX PENTAPHYLLUS.			
Five Leaf Aralia.			
	Per 10	Per 100	Per 1000
6 to 12 ins., L.O.	\$0.40	\$ 3.50	
12 to 18 ins., L.O.	.50	4.50	
18 to 24 ins., tr., well br.	1.50	12.00	
2 to 3 ft., tr., well br.	2.00	15.00	
3 to 4 ft., tr., well br.	3.00	25.00	

ALMOND, PRUNUS GLANDULOSA.			
Double Pink-flowering Almond, own root.			
12 to 18 ins., tr., well br.	2.50	20.00	
18 to 24 ins., tr., well br.	3.00	25.00	
2 to 3 ft., tr., well br.	3.50	30.00	

ALTHAEA, HIBISCUS SYRIACUS.			
Shrub Althaea.			
Varieties:			
AMPLISSIMUS—Double Red			
ARDENS—Double Violet			
BOULE DE FEU—Double Red			
JEANNE D'ARC—Double White			
PULCHERRIMUS—Double Pink			
6 to 12 ins., c.	.40	3.00	\$ 25.00
12 to 18 ins., c.	.50	3.50	30.00
18 to 24 ins., c.	.60	4.00	35.00
12 to 18 ins., tr.	1.00	8.00	60.00
18 to 24 ins., tr.	1.50	12.00	100.00
2 to 3 ft., tr.	2.00	15.00	125.00
3 to 4 ft., tr.	2.50	20.00	

Variety:			
ROSEA, Seedlings. Single flowers.			
4 to 6 ins., s.	.50	4.00	
6 to 12 ins., s.	.80	7.00	
12 to 18 ins., s.	1.25	10.00	
18 to 24 ins., s.	1.50	12.00	

CALYCANTHUS FLORIDUS.			
Sweet Shrub.			

6 to 12 ins., s.	3.00	25.00	
12 to 18 ins., s.	.45	4.00	35.00
18 to 24 ins., s.	.55	5.00	45.00
2 to 3 ft., s., whips.	.80	7.00	60.00
18 to 24 ins., s., 2 canes up.	1.00	10.00	
2 to 3 ft., s., 2 canes up.	1.25	12.50	

CARAGANA ARBORESCENS.			
-----------------------	--	--	--

6 to 12 ins., s.	3.00	25.00	
12 to 18 ins., s.	4.00	30.00	

CEPHALANTHUS OCCIDENTALIS.			
----------------------------	--	--	--

Buttombush.			
-------------	--	--	--

6 to 12 ins., c.	.40	3.50	30.00
12 to 18 ins., c.	.50	4.00	35.00
18 to 24 ins., c., well br.	.60	10.00	80.00
2 to 3 ft., c., well br.	2.00	15.00	

CORNUS AMOMUM.			
----------------	--	--	--

Silky Dogwood.			
----------------	--	--	--

6 to 12 ins., c.	.30	2.50	20.00
12 to 18 ins., c.	.40	3.00	25.00
18 to 24 ins., c.	.50	4.00	35.00
18 to 24 ins., tr., well br.	.50	9.00	80.00
2 to 3 ft., tr., well br.	1.50	12.50	

CORNUS STOLONIFERA.			
---------------------	--	--	--

Red Osier Dogwood.			
--------------------	--	--	--

6 to 12 ins., s.	.20	1.25	10.00
12 to 18 ins., s.	.30	2.00	15.00
18 to 24 ins., s.	.40	3.00	20.00
2 to 3 ft., s.	.50	4.00	25.00

CYDONIA JAPONICA.			
-------------------	--	--	--

Japanese Quince.			
------------------	--	--	--

4 to 6 ins., s.	.30	2.00	
6 to 12 ins., s.	.40	3.00	
12 to 18 ins., s.	.50	4.00	

CYDONIA JAPONICA RUBRA.			
-------------------------	--	--	--

Japanese Quince, True Upright Red.			
------------------------------------	--	--	--

6 to 12 ins., c.	1.00	8.00	
12 to 18 ins., c.	1.50	12.00	
18 to 24 ins., tr.	2.00	15.00	
18 to 24 ins., tr.	4.00	35.00	
2 to 3 ft., tr.	5.00	40.00	

CITISUS SCOPARIUS.			
--------------------	--	--	--

Scotch Broom.			
---------------	--	--	--

6 to 12 ins., s.	.60	5.00	
12 to 18 ins., s.	.75	6.50	
18 to 24 ins., s.	1.25	10.00	
2 to 3 ft., s.	1.50	12.50	

### DEUTZIA SCABRA.

#### Varieties:

##### CRENATA—Double Pink

##### PRIDE OF ROCHESTER

##### Double Rose

##### Per 100 1000

##### 6 to 12 ins., c.

##### 12 to 18 ins., c.

##### 18 to 24 ins., c.

##### 12 to 18 ins., well br.

##### 18 to 24 ins., well br.

##### 2 to 3 ft., well br.

##### 3 to 4 ft., well br.

##### Per 100 1000

##### 6 to 12 ins., c.

##### 12 to 18 ins., c.

##### 18 to 24 ins., c.

##### 12 to 18 ins., well br.

##### 18 to 24 ins., well br.

##### 2 to 3 ft., well br.

##### 3 to 4 ft., well br.

##### Per 100 1000

##### 6 to 12 ins., c.

##### 12 to 18 ins., c.

##### 18 to 24 ins., c.

##### 12 to 18 ins., well br.

##### 18 to 24 ins., well br.

##### 2 to 3 ft., well br.

##### 3 to 4 ft., well br.

##### Per 100 1000

##### 6 to 12 ins., c.

##### 12 to 18 ins., c.

##### 18 to 24 ins., c.

##### 12 to 18 ins., well br.

##### 18 to 24 ins., well br.

##### 2 to 3 ft., well br.

##### 3 to 4 ft., well br.

##### Per 100 1000

##### 6 to 12 ins., c.

##### 12 to 18 ins., c.

##### 18 to 24 ins., c.

##### 12 to 18 ins., well br.

##### 18 to 24 ins., well br.

##### 2 to 3 ft., well br.

##### 3 to 4 ft., well br.

##### Per 100 1000

##### 6 to 12 ins., c.

##### 12 to 18 ins., c.

##### 18 to 24 ins., c.

##### 12 to 18 ins., well br.

##### 18 to 24 ins., well br.

##### 2 to 3 ft., well br.

##### 3 to 4 ft., well br.

##### Per 100 1000

##### 6 to 12 ins., c.

##### 12 to 18 ins., c.

##### 18 to 24 ins., c.

##### 12 to 18 ins., well br.

##### 18 to 24 ins., well br.

##### 2 to 3 ft., well br.

##### 3 to 4 ft., well br.

### LIGUSTRUM SINENSE.

#### South Privet.

##### Per 10 100 1000

##### 6 to 12 ins., s.

##### 12 to 18 ins., s.

##### 18 to 24 ins., s.

##### 2 to 3 ft., s.

##### 12 to 18 ins., 2-yr. br., s.

##### 18 to 24 ins., 2-yr. br., s.

##### 2 to 3 ft., 2-yr. well br.

##### 18 to 24 ins., tr., well br.

##### 2 to 3 ft., tr., well br.

##### 3 to 4 ft., tr., well br.

##### 4 to 5 ft., tr., well br.

##### Per 10 100 1000

##### 6 to 12 ins., s.

##### 12 to 18 ins., s.

##### 18 to 24 ins., s.

##### 2 to 3 ft., s.

##### 12 to 18 ins., 2-yr. br., s.

##### 18 to 24 ins., 2-yr. br., s.

##### 2 to 3 ft., 2-yr. well br.

##### 18 to 24 ins., tr., well br.

##### 2 to 3 ft., tr., well br.

##### 3 to 4 ft., tr., well br.

##### 4 to 5 ft., tr., well br.

##### Per 10 100 1000

##### 6 to 12 ins., s.

##### 12 to 18 ins., s.

##### 18 to 24 ins., s.

##### 2 to 3 ft., s.

##### 12 to 18 ins., 2-yr. br., s.

##### 18 to 24 ins., 2-yr. br., s.

##### 2 to 3 ft., 2-yr. well br.

##### 18 to 24 ins., tr., well br.

##### 2 to 3 ft., tr., well br.

##### 3 to 4 ft., tr., well br.

##### 4 to 5 ft., tr., well br.

##### Per 10 100 1000

##### 6 to 12 ins., s.

##### 12 to 18 ins., s.

##### 18 to 24 ins., s.

##### 2 to 3 ft., s.

##### 12 to 18 ins., 2-yr. br., s.

##### 18 to 24 ins., 2-yr. br., s.

##### 2 to 3 ft., 2-yr. well br.

##### 18 to 24 ins., tr., well br.

##### 2 to 3 ft., tr., well br.

##### 3 to 4 ft., tr., well br.

##### 4 to 5 ft., tr., well br.

##### Per 10 100 1000

##### 6 to 12 ins., s.

##### 12 to 18 ins., s.

##### 18 to 24 ins., s.

##### 2 to 3 ft., s.

##### 12 to 18 ins., 2-yr. br., s.

##### 18 to 24 ins., 2-yr. br., s.

##### 2 to 3 ft., 2-yr. well br.

##### 18 to 24 ins., tr., well br.

##### 2 to 3 ft., tr., well br.

##### 3 to 4 ft., tr., well br.

**SPIRAEA CALLOSA ROSEA.**

Pink Fortune Spiraea.

	Per 10	Per 100	Per 1000
6 to 12 ins. s. ....	3.00	30.00	300.00
12 to 18 ins. s. ....	4.00	40.00	400.00

**SPIRAEA PRUNIFOLIA.**

Bridal Wreath.

18 to 24 ins. tr. ....	3.00	30.00	300.00
2 to 3 ft. tr. ....	4.00	40.00	400.00
2 to 4 ft. tr. ....	5.00	50.00	500.00

**SPIRAEA REEVESIANA.**

Single White Flower.

6 to 12 ins. c. ....	.40	3.00	25.00
12 to 18 ins. c. ....	.50	4.00	35.00
18 to 24 ins. c. ....	.60	5.00	45.00

**SPIRAEA THUNBERGI.**

Thunberg Spiraea.

6 to 12 ins. L.O. ....	.70	5.00	40.00
12 to 18 ins. L.O. ....	.90	7.00	50.00
18 to 24 ins. L.O. ....	2.00	15.00	100.00
2 to 3 ft. L.O. ....	2.50	20.00	150.00

**SPIRAEA VANHOUTTEI.**

Per 10 Per 100 Per 1000

L.O. field-grown ....	\$.35	3.50	35.00
6 to 12 ins. c. ....	.40	4.00	40.00
12 to 18 ins. c. ....	.50	5.00	50.00
18 to 24 ins. c. ....	.60	6.00	60.00

**STAPHYLEA TRIFOLIA.**

Per 10 Per 100 Per 1000

6 to 12 ins. s. ....	4.00	40.00	400.00
12 to 18 ins. s. ....	5.00	50.00	500.00

**SYMPHORICARPOS VULGARIS.**

Per 10 Per 100 Per 1000

6 to 12 ins. 1-yr. c. ....	2.00	20.00	200.00
12 to 18 ins. 1-yr. c. ....	2.50	25.00	250.00
18 to 24 ins. 1-yr. c. ....	3.00	30.00	300.00

**SYRINGA PERSICA.**

Persian Lilac, Purple.

Lining-out ....	.50	4.00	40.00
6 to 12 ins. c. ....	.65	5.50	55.00
12 to 18 ins. c. ....	.75	6.50	65.00
18 to 24 ins. c. ....	1.50	12.00	120.00
2 to 3 ft. c. ....	3.00	20.00	200.00
2 to 4 ft. c. ....	4.00	30.00	300.00

**SYRINGA VULGARIS.**

Common Purple Lilac.

	Per 10	Per 100	Per 1000
12 to 18 ins. tr. ....	\$.20	2.00	20.00
18 to 24 ins. tr. ....	2.50	25.00	250.00
2 to 3 ft. tr. ....	3.00	30.00	300.00

**WEIGELA AMABILIS.**

Light Pink.

Lining-out ....	.35	3.00	30.00
6 to 12 ins. c. ....	.45	3.50	35.00
12 to 18 ins. c. ....	.55	4.50	45.00

**WEIGELA LUTEA.**

Yellow.

Lining-out ....	.60	5.00	50.00
6 to 12 ins. c. ....	.80	6.00	60.00

**WEIGELA HENDERSONI.**

Dark Pink.

Lining-out ....	.35	3.00	30.00
6 to 12 ins. c. ....	.45	3.50	35.00
12 to 18 ins. c. ....	.55	4.50	45.00

**WEIGELA ROSEA.**

Pink.

Lining-out ....	.35	3.00	30.00
6 to 12 ins. c. ....	.45	3.50	35.00
12 to 18 ins. c. ....	.55	4.50	45.00

**FOREST and SHADE TREES****ACER DASYCARPUM.**

Silver Maple.

	Per 10	Per 100	Per 1000
6 to 12 ins. s. ....	1.00	10.00	100.00
12 to 18 ins. s. ....	1.25	12.50	125.00
18 to 24 ins. s. ....	1.50	15.00	150.00
2 to 3 ft. s. ....	2.00	20.00	200.00

**ACER RUBRUM.**

Scarlet Maple.

6 to 12 ins. s. ....	.30	2.00	15.00
12 to 18 ins. s. ....	.35	2.50	20.00
18 to 24 ins. s. ....	.45	3.00	25.00

**ACER SACHARINUM.**

Sugar or Hard Maple.

6 to 12 ins. s. ....	1.25	10.00	100.00
12 to 18 ins. s. ....	.30	2.00	15.00
18 to 24 ins. s. ....	.35	2.50	20.00

**ASCULUS OCTANDRA.**

Yellow Buckeye.

6 to 12 ins. s. ....	.20	1.50	12.00
12 to 18 ins. s. ....	.30	2.00	15.00
18 to 24 ins. s. ....	.35	2.50	20.00
2 to 3 ft. s. ....	.50	3.50	30.00

**ALBIZIA JULIBRISIN.**

Mimosa Tree.

6 to 12 ins. s. ....	.50	4.00	40.00
12 to 18 ins. s. ....	.75	5.00	50.00
18 to 24 ins. s. ....	.85	6.00	60.00
2 to 3 ft. s. ....	7.00	60.00	600.00
2 to 4 ft. s. ....	10.00	90.00	900.00
2 to 5 ft. s. ....	12.50	100.00	1000.00

**CELTIS OCCIDENTALIS.**

Northern Hackberry.

6 to 12 ins. s. ....	.30	2.00	15.00
12 to 18 ins. s. ....	.40	2.50	20.00

**CERIS CANADENSIS.**

American Redbud.

6 to 12 ins. s. ....	1.50	10.00	100.00
12 to 18 ins. s. ....	.25	2.00	15.00
18 to 24 ins. s. ....	.30	2.50	20.00
2 to 3 ft. s. ....	.45	3.50	30.00
2 to 4 ft. s. ....	.60	4.50	45.00

**CLADASTIS LUTEA.**

Yellowwood.

6 to 12 ins. s. ....	.35	2.50	20.00
12 to 18 ins. s. ....	.45	3.50	30.00

**FAGUS AMERICANA.**

American Beech.

6 to 12 ins. s. ....	1.00	8.00	80.00
12 to 18 ins. s. ....	.20	1.25	10.00
18 to 24 ins. s. ....	.25	1.50	12.00
2 to 3 ft. s. ....	.30	2.00	15.00

**FRAXINUS AMERICANA.**

White Ash.

6 to 12 ins. s. ....	.30	2.00	15.00
----------------------	-----	------	-------

**FRAXINUS LANCEOLATA.**

Green Ash.

6 to 12 ins. s. ....	.60	5.00	50.00
12 to 18 ins. s. ....	.15	1.00	8.00
18 to 24 ins. s. ....	.20	1.25	10.00
2 to 3 ft. s. ....	.25	1.50	12.00
3 to 4 ft. s. ....	.30	2.00	15.00
4 to 5 ft. s. ....	1.50	10.00	100.00
5 to 6 ft. s. ....	2.00	15.00	150.00
6 to 7 ft. s. ....	2.50	20.00	200.00

**GINKGO BILOBA.**

Maidenhair Tree.

6 to 12 ins. s. ....	1.00	8.00	80.00
12 to 18 ins. s. ....	1.25	10.00	100.00
18 to 24 ins. s. ....	1.50	12.00	120.00
2 to 3 ft. s. ....	2.00	15.00	150.00
3 to 4 ft. s. ....	6.00	60.00	600.00
4 to 5 ft. s. ....	8.00	80.00	800.00

**LEDITSIA TRIACANTHOS INERMIS.**

Thornless Honey Locust.

6 to 12 ins. s. ....	1.50	10.00	100.00
12 to 18 ins. s. ....	.30	2.00	15.00
18 to 24 ins. s. ....	.40	2.50	20.00

**GYMNOCLADUS DIOICUS.**

Kentucky Coffee Tree.

6 to 12 ins. s. ....	1.00	8.00	80.00
12 to 18 ins. s. ....	1.25	10.00	100.00
18 to 24 ins. s. ....	1.50	12.00	120.00
2 to 3 ft. s. ....	2.00	15.00	150.00
3 to 4 ft. s. ....	3.50	30.00	300.00
4 to 5 ft. s. ....	7.50	75.00	750.00

**HICORIA LACINIOSA.**

Shellbark Hickory.

6 to 12 ins. s. ....	1.00	8.00	80.00
12 to 18 ins. s. ....	1.25	10.00	100.00
18 to 24 ins. s. ....	1.50	12.00	120.00
2 to 3 ft. s. ....	2.00	15.00	150.00
3 to 4 ft. s. ....	3.50	30.00	300.00
4 to 5 ft. s. ....	7.50	75.00	750.00

**HICORIA OVATA.**

Shagbark Hickory.

6 to 12 ins. s. ....	4.00	30.00	300.00
12 to 18 ins. s. ....	6.00	50.00	500.00
18 to 24 ins. s. ....	9.00	80.00	800.00

**JUGLANS NIGRA.**

Black Walnut.

6 to 12 ins. s. ....	.35	2.50	20.00
12 to 18 ins. s. ....	.50	3.50	30.00
18 to 24 ins. s. ....	.60	5.00	40.00
2 to 3 ft. s. ....	.80	7.00	60.00

**LIRIODENDRON TULIPIFERA.**

Tulip Tree.

	Per 10	Per 100	Per 1000
6 to 12 ins. s. ....	\$.25	2.50	25.00
12 to 18 ins. s. ....	.30	3.00	30.00
18 to 24 ins. s. ....	.35	3.50	35.00
2 to 3 ft. s. ....	.50	5.00	50.00
3 to 4 ft. s. ....	.60	6.00	60.00
4 to 5 ft. s. ....	7.00	60.00	600.00
5 to 6 ft. s. ....	10.00	90.00	900.00
6 to 7 ft. s. ....	12.50	100.00	1000.00

**MAGNOLIA TRIPETALA.**

Umbrella Magnolia.

6 to 12 ins. s. ....	4.50	40.00	400.00
12 to 18 ins. s. ....	5.50	50.00	500.00
18 to 24 ins. s. ....	7.00	60.00	600.00
2 to 3 ft. s. ....	10.00	75.00	750.00
3 to 4 ft. s. ....	12.50	100.00	1000.00

**OXYDENDRUM ARBOREUM.**

Sourwood.

6 to 12 ins. s. ....	.30	1.50	12.00
12 to 18 ins. s. ....	.35	2.50	20.00
18 to 24 ins. s. ....	.45	3.50	30.00

**PLATANUS OCCIDENTALIS.**

American Plane Tree.

6 to 12 ins. s. ....	.30	2.00	15.00
12 to 18 ins. s. ....	.35	2.50	20.00
18 to 24 ins. s. ....	.40	3.00	25.00
2 to 3 ft. s. ....	.50	4.00	30.00
3 to 4 ft. s. ....	.60	5.00	40.00
4 to 5 ft. s. ....	.80	7.00	60.00

**POPULUS NIGRA ITALICA.**

Lombardy Poplar.

6 to 12 ins. s. ....	.20	1.50	12.00
12 to 18 ins. s. ....	.30	2.00	15.00
18 to 24 ins. s. ....	.40	3.00	25.00
2 to 3 ft. s. ....	.50	4.00	30.00
3 to 4 ft. s. ....	.60	5.00	40.00
4 to 5 ft. s. ....	.70	6.00	50.00

**PRUNUS NEWPORT.**

New Purple-leaf Plum.

6 to 12 ins. s. ....	2.50	20.00	200.00
12 to 18 ins. s. ....	3.00	25.00	250.00
18 to 24 ins. s. ....	3.50	30.00	300.00
2 to 3 ft. s. ....	4.50	40.00	400.00
3 to 4 ft. s. ....	5.50	50.00	500.00
4 to 5 ft. s. ....	6.00	55.00	550.00

**PRUNUS PERSICA ALBA PLENA.**

Double White-flowering Peach.

6 to 12 ins. s. ....	2.00	15.00	150.00
12 to 18 ins. s. ....	3.00	25.00	250.00
18 to 24 ins. s. ....	3.50	30.00	300.00
2 to 3 ft. s. ....	4.50	40.00	400.00
3 to 4 ft. s. ....	5.50	50.00	500.00
4 to 5 ft. s. ....	6.00	55.00	550.00

**PRUNUS PERSICA RUBRA PLENA.**

Double Red-flowering Peach.

6 to 12 ins. s. ....	2.00	15.00	150.00
12 to 18 ins. s. ....	3.00	25.00	250.00
18 to 24 ins. s. ....	3.50	30.00	300.00
2 to 3 ft. s. ....	4.50	40.00	400.00
3 to 4 ft. s. ....	5.50	50.00	500.00
4 to 5 ft. s. ....	6.00	55.00	550.00

**PRUNUS PERSICA ALBA PLENA.**

Double White-flowering Peach.&lt;/



# On and Off the Nursery

By L. C. Chadwick

## COMMENTS ON SOME UNCOMMON SHRUBS.

### *Cotoneaster Racemiflora Soongorica.*

After being on test in our gardens for several years, *Cotoneaster racemiflora soongorica*, the Sungari redbead cotoneaster, seems to me to be one of the best members of this excellent genus of plants. It is, perhaps, not a plant that will be particularly useful for the small border, but its informal, graceful, spreading and somewhat drooping branches lend a character which makes it particularly effective for mass planting on uneven terrain. The relatively good flowering habit for cotoneasters, the oval, grayish-green leaves and the abundant large, dull red fruits add interest to this plant throughout the season.

### *Daphne Somerset.*

The Somerset daphne was introduced a few years ago and has been under observation for about four years. Its upright habit of growth reminds one of the old February daphne, *Daphne mezereum*, but, fortunately, it is somewhat fuller and better branched at the base. The foliage is also much like that of *Daphne mezereum*, but at Columbus, O., nearly evergreen. The small, pinkish-white, fragrant flowers are produced abundantly on the stiff, upright stems. With us the earliest it has bloomed is April 15, and the latest, May 10. One of the chief criticisms of the plant is its susceptibility to breakage from heavy snow. Our largest plant, which was about four and a half to five feet tall, was severely damaged during the winter of 1944-45.

### *Forsythia Ovata.*

The Korean forsythia, *Forsythia ovata*, has been under observation for several years, and I have little good to say about it. Perhaps if the observations had been made in a colder climate, which frequently takes a toll of the flower buds of the more common forsythias, I should think more highly of it. With us it is so greatly inferior to the showy border forsythia and some of the others that the fact that it blooms a week earlier means little. It is a weak grower and has produced flowers sparingly.

### *Lonicera Gracilipes.*

The spangle honeysuckle, *Lonicera gracilipes*, is a little-used species of

honeysuckle which warrants much more attention. Smaller than most of the honeysuckles, it attains a height of only five to six feet at maturity and possesses a pleasing upright, spreading habit of growth. One of its outstanding characteristics is the pendulous carmine-pink flowers produced in middle to late April. Scarlet fruits are produced in June. This plant deserves more attention as a useful border subject.

### *Viburnums.*

Several viburnums which are relatively uncommon in the trade should be mentioned. One of the viburnums seen occasionally is *Viburnum bitchiuense*, the Yeddo viburnum. This species has little to commend its use. One often wonders how some plants find their way into the trade. Perhaps in this case seeds of it were substituted for that of *Viburnum carlesi* by some unscrupulous Japanese seed dealer. *Viburnum bitchiuense* flowers earlier than *Viburnum carlesi*, but the flower clusters are much smaller and are produced sparingly. The plant is slender and straggly.

Another of the early-flowering viburnums that has little to commend its use is *Viburnum fragrans*, the fragrant viburnum. About the only good thing that can be said about it is its early-flowering habit. Usually flowering in middle to late March or

early April, this plant with the early spring of 1946, came into bloom March 7. Unfortunately the small, often poorly formed heads of fragrant, pinkish flowers are produced sparingly. The plant is a tall, leggy grower.

I cannot pass over these uncommon viburnums without mentioning *Viburnum macrocephalum* sterile, the Chinese snowball viburnum. Here we have a good-growing bush of eight to twelve feet in height, excellent foliage and exceptionally large and beautiful white snowball flowers. Few will question the superiority of its foliage, and perhaps its habit of growth, over the other snowballs. Some will prefer the smaller, regular arrangement of the flowers of the Japanese snowball. During the past five years the Chinese snowball viburnum has flowered at Columbus between April 26 and May 22. On two occasions it has also produced good flowers in the fall. Keep the Chinese snowball viburnum in mind and give it a trial.

Nurserymen and landscape gardeners who have wished for an improvement of the leatherleaf viburnum can find it in *Viburnum lantana-phyllum* (*rhytidophyloides*), a hybrid between *Viburnum lantana* and *Viburnum rhytidophyllum*. It is semi-evergreen and hardy in limited tests in our locality.

### *Weigela Bristol Ruby.*

Introduced a few years ago, Bristol Ruby weigela is destined to become one of the best of the weigelas. It has a better habit of growth than

## WE OFFER AT LAST YEAR'S PRICES— CHINESE BLIGHT-RESISTANT CHESTNUT TREES

1-yr.-old lining-out stock, row-run, culls out, 6 to 14 ins., mostly 8 to 12 ins., few 6 to 8 ins. Usually we have 10 per cent 14 to 18 ins. This stock is thrifty and well grown and has about as much roots as tops.

	Per 1000
1 to 5000 .....	\$200.00
5000 to 10,000 .....	188.00
10,000 and up .....	180.00
6 to 10 ins., graded, culls out .....	125.00
2-yr.-old, 12 to 18 ins., suitable for lining-out or retail sales.	
100 .....	\$50.00

Stock ready about November 1. Order from this ad.

**GOLD CHESTNUT NURSERY, Cowen, West Va.**

# LINING-OUT STOCK

For Fall 1946—Spring 1947 Shipment

	Per 100	Per 1000		Per 100	Per 1000
50,000 <i>Abies balsamea</i> , 2-yr., S.....	\$ 3.50	\$ 25.00	3000 <i>Taxus cusp. browni</i> , 1-yr., T.,		
1500 4-yr., T.....	15.00	120.00	6 to 8 ins.....	\$30.00	\$250.00
3500 TT., 8 to 12 ins.....	25.00	200.00	TT., 8 to 12 ins.....	45.00	400.00
350 <i>Abies concolor</i> , 3-yr., S.....	6.00	50.00	5000 <i>Taxus cusp. capitata</i> (upright from		
1900 TT., 8 to 12 ins.....	35.00	300.00	seed), 4-yr., T., 6 to 10 ins.....	55.00	500.00
1900 <i>Abies fraseri</i> , TT., 10 to 12 ins.....	35.00	300.00	5 yr. T., 8 to 12 ins.....	65.00	600.00
5800 TT., 8 to 12 ins.....	30.00	250.00	10,000 <i>Taxus cuspidata nana</i> (brevifolia),		
800 <i>Abies concolor</i> , 4-yr., T.....	20.00	180.00	2-yr., T., 6 to 10 ins.....	35.00	350.00
5000 <i>Ampelopsis velitchi</i> , 1-yr., S.....	6.00	50.00	3000 3-yr., T., 8 to 12 ins.....	45.00	400.00
3000 <i>Acer palm. atrop.</i> , red edige, 2 1/4-in.	30.00	250.00	5000 <i>Taxus cusp. intermedia</i> , 1-yr., T.....	30.00	250.00
50,000 <i>Berberis thun. atropurp.</i> , 1-yr., S.,			5000 <i>Taxus media</i> (upright), 2-yr., T.,	40.00	350.00
row run.....	6.00	50.00	8 to 10 ins.....	40.00	350.00
2000 <i>Biota aurea nana</i> , pot grafts.....	35.00	300.00	5000 <i>Taxus media hatfieldi</i> , 2-yr., T.,		
500 <i>Chamaecyparis pisifera aurea</i> ,			6 to 10 ins.....	30.00	250.00
TT., 12 to 15 ins.....	30.00	250.00	5000 2-yr., T., 8 to 10 ins.....	40.00	350.00
2000 <i>plumosa</i> , 1-yr., C.....	25.00	200.00	3000 TT., 8 to 12 ins.....	50.00	450.00
2000 <i>plum. aurea</i> , 1-yr., C.....	25.00	200.00	5000 <i>Taxus media hicksi</i> , 1-yr., T.....	25.00	200.00
1400 <i>plum. aurea</i> , TT., 8 to 12 ins.....	35.00	300.00	5000 2-yr., T., 8 to 10 ins.....	40.00	350.00
2000 <i>plum. aurea</i> , T., 8 to 10 ins.....	25.00	225.00	5000 TT., 8 to 12 ins.....	45.00	400.00
2000 <i>plumosa</i> , T., 8 to 12 ins.....	25.00	225.00	5000 <i>Taxus media halloran strain</i> , 1-yr., T.....	30.00	250.00
2000 <i>Cornus florida rubra</i> , pot grafts.....	50.00	400.00	5000 2-yr., T., 6 to 10 ins.....	45.00	400.00
1000 <i>Hydrangea A. G.</i> , 1-yr., T., 12 to 18 ins.	20.00	180.00	4000 <i>Taxus Moon's columnaris</i> (Fall '46),		
300 <i>Daphne mezereum</i> , TT., 10 to 14 ins.....	40.00	350.00	2 1/4-in. p.....	30.00	250.00
175 <i>Euonymus alatus</i> , TT., 10 to 14 ins.....	25.00	200.00	1000 2-yr., T., 6 to 10 ins.....	40.00	350.00
5000 <i>Juniperus excelsa stricta</i> , 1-yr. C.....	30.00	250.00	3000 <i>Thuja occidentalis</i> ,		
450 <i>communis depressa</i> , T., 3 to 5 ins.....	20.00	180.00	4-yr., T., 10 to 12 ins.....	20.00	180.00
2000 <i>pfitzeriana</i> , T., 6 to 10 ins.....	30.00	250.00	1500 <i>Thuja occ. boothii</i> (Best Globe), TT.,		
5000 <i>pfitzeriana</i> , 1-yr., C.....	25.00	200.00	8 to 12 ins.....	30.00	250.00
500 <i>japonica</i> , T., 6 to 10 ins.....	30.00	250.00	2000 <i>Thuja occ. elegantissima</i> ,		
500 <i>sargentii</i> , T., 6 to 10 ins.....	25.00	200.00	T., 6 to 10 ins.....	25.00	200.00
140 <i>sabina vonehron</i> , TT., 10 to 14 ins.....	40.00	350.00	1500 TT., 8 to 12 ins.....	35.00	300.00
1000 <i>squamata meyeri</i> , T., 6 to 10 ins.....	35.00	300.00	2500 <i>Thuja occ. hoveyi</i> , T., 8 to 12 ins.....	25.00	200.00
100 <i>virg. kosteri</i> , TT., 10 to 14 ins.....	60.00	500.00	850 TT., 8 to 12 ins.....	35.00	300.00
1000 <i>virginiana</i> (in variety), pot grafts.....	50.00	400.00	10,000 <i>Thuja occ. pyramidalis</i> , T., 8 to 12 ins.	30.00	350.00
1000 <i>Kolkwitzia amabilis</i> , 1-yr., T.....	18.00	150.00	2000 pot grafts.....	35.00	300.00
1000 <i>Philadelphus virginialis</i> , 1-yr., T.....	18.00	150.00	5000 <i>Thuja occidentalis nigra</i> , 1-yr., T.....	18.00	150.00
1000 <i>Picea excelsa</i> , TT., 18 to 24 ins.....	45.00	400.00	5000 2-yr., T., 10 to 12 ins.....	25.00	200.00
3500 <i>Picea pungens</i> , TT., 8 to 12 ins.....	30.00	250.00	5000 <i>Tsuga canadensis</i> , 2-yr., T., 6 to 10 ins.	30.00	250.00
2000 <i>Pseudotsuga douglasii</i> , TT., 8 to 12 ins.	40.00	350.00	1000 <i>Viburnum carlesii</i> , pot grafts.....	40.00	350.00
10,000 <i>Fleris japonica</i> , 2 1/4-in. pots.....	25.00	200.00	1000 <i>Viburnum burkwoodii</i> , pot grafts.....	40.00	350.00
10,000 <i>Sorbus aucuparia</i> , 1-yr., S.....	6.00	50.00	1000 <i>Wistaria</i> (blue grafts), T.....	35.00	300.00
20,000 <i>Picea pungens</i> , 2-yr., S.....	6.00	50.00	10,000 <i>Daphne eneorum</i> (rooted cuttings)....	10.00	90.00
5000 <i>Pinus banksiana</i> , 3-yr., S.....	3.50	20.00			
1500 3-yr. T.....	5.00	35.00			
1000 <i>Pinus densata</i> , 2-yr., S.....	4.00	30.00			
10,000 <i>Pinus resinosa</i> , 2-yr., S.....	5.00	35.00			
2000 3-yr. T.....	6.00	50.00			
4000 <i>Pinus rigida</i> , 3-yr., S.....	3.50	22.50			
1500 3-yr. T.....	6.00	50.00			
100,000 <i>Pinus strobus</i> , 2-yr., S.....	5.00	35.00			
2000 1-yr. T.....	6.00	50.00			
6000 <i>Pseudotsuga douglasii</i> , 2-yr., S.....	6.00	50.00			
300 <i>Taxus canadensis stricta</i> ,					
TT., 10 to 14 ins.....	30.00	300.00			
1500 T., 6 to 10 ins.....	35.00	300.00			
30,000 <i>Taxus cuspidata</i> (spreading),					
T., 6 to 10 ins.....	30.00	250.00			
5000 1-yr. T.....	20.00	180.00			

**E. D. ROBINSON SALES AGENCY, Wallingford, Conn.**

"A friendly, efficient service"

most of the common weigelas and produces dark red flowers in abundance. The main flowering period is the third or fourth week in May, but flowers are produced sparingly during most of the summer and early fall.

H. C. BAILEY has left the employ of the Sherman Nursery Co., Charles City, Ia., to take charge of his mother's farm.

ON the day that his oldest daughter was being married, June 22, Dr. H. B. Tukey, head of the department of agriculture at Michigan State College, East Lansing, Mich., welcomed his second son home from service. The elder is studying for his master's degree in horticulture at Michigan State College, while the second son is completing his work toward a bachelor's degree in the same department.

## APPLE and PEAR GRAFTS OUR SPECIALTY

We offer a limited amount of **Peach, Apple, Pear** and **Plum** for Fall and Spring delivery. Write for special prices on quantity lots.

### SHADE TREES.

Sizes, 6 to 8 ft., to 3-in. caliper in **Scarlet Maple, Chinese Elm, Pin Oak, American Ash, Cercis Canadensis** 6 to 8 ft.

## EGYPTIAN NURSERY & LANDSCAPE CO.

Farina, Ill.

Phone 64

# Fruit Variety Survey

Data to guide nurserymen and orchardists in the propagation and planting of fruit varieties are being collected by the American Pomological Society through a fruit variety appraisal which the society is making with the cooperation of the American Association of Nurserymen.

A variety appraisal committee, headed by John Bregger, Clemson, S. C., who is associate secretary of the society, was appointed last summer. Work on the project began almost immediately on a 3-part program, which included surveying state horticultural agencies to determine their present variety recommendations for new fruit planting, surveying fruit tree and plant nurseries to determine their present programs of variety propagation and quantity of sales, and surveying fruit tree growers for their variety preferences.

The surveys made use of blanks listing all well known and new varieties of various fruits. Varieties now being grown were checked, as well as those old varieties which should be discarded and new ones which should be added. The first surveys were limited to apple, peach and strawberry; other fruits and nuts are to be covered later. It is believed that nurseries will make the first real use of this material by directing their future propagation plans in accordance with the variety preferences of the best informed horticulturists. Particular attention is being focused on inferior non-profitable varieties of fruits which complicate the marketing program.

A preview of the address on "The National Fruit Variety Survey," which Mr. Bregger will make July 18 before the annual convention of the American Association of Nurserymen at Miami Beach, Fla., is contained in an article by Mr. Bregger entitled "Michigan and Indiana Growers Appraise Fruit Varieties," appearing in the 1946 summer issue of Fruit Varieties and Horticultural Digest, published by the American Pomological Society. The article reports on but a small part of the total survey, but it indicates the type of information which will be available.

The leading apple varieties in Michigan, listed according to their frequency of appearance, are: Jonathan, McIntosh, Northern Spy, Delicious, Rhode Island, Baldwin, Grimes, Stayman, Golden Delicious, Wagener, Duchess and Fameuse. In Indiana they are: Rome, Stayman, Jonathan, Grimes, Golden Delicious,

Delicious, Turley, Ben Davis (and Gano), Winesap, Wealthy and Yellow Transparent.

The varieties that would be planted by these same growers were they planting an orchard today as indicated in the average per cent of the total acreage to be devoted to each variety are: In Michigan, Jonathan, 33; Northern Spy, 23; McIntosh, 19; Delicious, 18; Rome, 17; Rhode Island, 13; Stayman, 13; Turley, 12; Grimes, 10. The intention to plant list remains somewhat the same in the first few varieties for both states, but in Indiana only six varieties are strongly favored on the new planting list, as follows: Jonathan, 21; Rome, 18; Golden Delicious, 17; Delicious, 13; Stayman, 13; Turley, 12; Grimes, 10.

One of the most interesting and impressive parts of the survey is the list of varieties which fruit growers would discard. Those apple varieties which both Michigan and Indiana growers agreed should be discarded include Baldwin, Ben Davis, Chennango, Duchess, Fameuse, King David, Rambo, Red Astrachan, Tolman Sweet, Wagener, Winter Banana

and Wolf River. Additional varieties to be discarded in Michigan are Maiden Blush, Stark, Northwestern, Tompkins, King and Yellow Transparent, while other varieties to be discarded in Indiana are Arkansas, Benoni, Hubbardston, Northern Spy, Rhode Island, Wagener, Winesap and York. In the case of most red varieties, the trend toward using various red strains of Rome, as well as red strains of Delicious and Stayman are strongly favored. Red strains of Northern Spy and McIntosh are less emphasized in this section of the country.

Results of the peach appraisal are equally interesting. Out of nearly twenty varieties prevalent in existing orchards in Indiana and Michigan, more than half were planned for omission from future plantings. According to the survey, the chief discard varieties in Michigan proved to be Admiral Dewey, Arp, Carman, Champion, Early Crawford, Late Crawford, Lemon Free, Oriole, South Haven and Wilma. Indiana growers would discard Carman, Early Wheeling, Red Bird, Hardee, Lemon Free, Mayflower and Rochester.

The continued prestige of Elberta in the north is most striking; while a larger number of Michigan growers would prefer Hale Haven over

## YOU ARE CORDIALLY INVITED TO PAY US A VISIT ON YOUR WAY TO OR FROM MIAMI

We are 100 miles south of Nashville, just off U. S. Highway 241, and 100 miles west of Chattanooga, just off U. S. Highway 72. Excellent highways to our door. Come by and see the home of "CHASE'S ALABAMA GROWN".



Ornamentals Only

Wholesale Only

1889

1946

### CHASE NURSERY CO.

Chase, Alabama



# HERE IS THE RECORD! . . . THIS IS THE ROSE!

## *Charlotte Armstrong*

*Queen of them all*

1. Finest rose grown or sold by the Armstrong Nurseries in 56 years of rose growing.
2. The only All-America Award Winner for 1941, the year of its introduction.
3. Awarded, in 1942, the famous John Cook Medal for "The Best New American Rose since 1935," and the Fuerstenberg Prize for "The Best New Rose of American Origin." In October of 1944, was awarded the Gertrude Hubbard Gold Medal for the best new American Rose disseminated in the past five years.
4. The rose has given outstanding performance and pleasure everywhere it has been grown.
5. Constantly increasing in popularity and demand, more Charlotte Armstrong roses were grown and sold this past year than ever before.
6. Charlotte Armstrong, as well as the other roses mentioned below, was produced by the Armstrong Research Department, the leading rose-breeding project in the United States.

### *From Leading Rose Growers*

You can get these finer roses, all products of Armstrong Research. *Charlotte Armstrong*. 1941 All-America Award Winner. *Debonair*. Fine new yellow rose. *Mirandy*. Great new red rose, top 1945 All-America Award Winner.

*Show Girl*. Amazingly long, lovely buds of phlox-pink. We think the finest pink since Picture. *Sweet Sixteen*. Long slender buds in pink, rose and gold. Has the sparkling radiance of youth.

If you are offering your customers the best of the new roses, those which are in greatest demand, then you will be handling these Armstrong Roses.



*Charlotte Armstrong*

**ARMSTRONG NURSERIES**  
ONTARIO, CALIFORNIA

*"Finer Roses Through Research"*

Elberta, even they would plant a large acreage of the latter. Favor was almost equally divided on the question of planting or discarding Early Elberta in Michigan and South Haven in Indiana. New varieties, other than those originating in Michigan, are also absent from consideration, showing that it takes a long time for even a new superior variety to become established.

Peach varieties to be included in new plantings are shown, with the figure preceding the varietal name representing the number of growers reporting planned plantings of the variety, and the figure following representing the average per cent of the total acreage to be devoted to it. In Michigan: 87, Hale Haven, 32; 72, Elberta, 39; 58, Red Haven, 15; 27, Fertile Hale, 15; 26, Golden Jubilee, 15; 22, J. H. Hale, 16; 22, Rochester, 14; 22, Early Hale Haven, 11; 16, Kal Haven, 10; 12, Gage Elberta, 15; 11, Early Elberta, 13; 9, Sunday-Elberta, 11. In Indiana new varieties would include: 21, Elberta, 41; 20, Hale Haven, 27; 15, Golden Jubilee, 24; 14, Red Haven, 13; 10, Early Elberta (Gleason), 18; 10, Belle of Georgia, 10; 10, J. H. Hale, 9; 10, Champion, 7; 9, Shipper Late Red (Big Red), 29.

## PYRAMIDAL ARBORVITAE

Sizes: 3 to 4 ft., 4 to 5 ft., 5 to 6 ft.,

**IRISH JUNIPER**, 3 to 4 ft., 4 to 5 ft.

**GREEK JUNIPER**, 18 to 24 ins., 24 to 30 ins.

**GLOBE ARBORVITAE**, 15 to 18 ins., 18 to 24 ins.

A good assortment of **Grafted**

**Junipers—Taxus—Pfitzers—Spruces**

**Shrubs—and—Shade Trees.**

Carload and truckload quantities.

Fall delivery.

**THE BERRYHILL NURSERY CO.**

4 mi. N. E. on state route 4.

Box 696

Springfield, Ohio

## Coming Events

### MEETING CALENDAR.

July 14 to 18, American Association of Nurserymen, Ritz Plaza hotel, Miami Beach, Fla.

July 15, National Landscape Nurserymen's Association, Ritz Plaza hotel, Miami Beach, Fla.

July 30, Maryland Nurserymen's Association, Beltsville and Glendale.

August 6 and 7, Pennsylvania Nurserymen's Association, Penn-Harris hotel, Harrisburg.

August 7 and 8, Southern Nurserymen's Association, O'Henry hotel, Greensboro, N. C.

August 11 to 13, Virginia Nurserymen's Association, Hotel Patrick Henry, Roanoke.

August 14, Indiana Association of Nurserymen, J. C. Bunch & Son, Terre Haute.

August 16, Michigan Association of Nurserymen, Hotel Vincent, Benton Harbor.

August 27 to 29, Texas Association of Nurserymen, Adolphus hotel, Dallas.

August 27 to 30, National Shade Tree Conference, Hotel Statler, Boston, Mass.

August 29, Ohio Nurserymen's Association, Painesville.

September 3 to 5, National Nut Growers' Association, Ohio Agricultural Experiment Station, Wooster.

September 16 to 18, Oregon Association of Nurserymen.

September 23 to 25, California Association of Nurserymen, Berkeley.

October 8 to 10, United Horticulture, Wade Park Manor, Cleveland, O.

November 17 to 20, American Institute of Park Executives, Jefferson hotel, St. Louis, Mo.

### NUT GROWERS SET DATES.

Ohio members of the Northern Nut Growers' Association will be hosts at the association's convention, which is to be held September 3 to 5, at the Ohio agricultural experiment station, Wooster.

### MARYLAND PLANS.

The summer meeting of the Maryland Nurserymen's Association will be held July 30, announces Paul S. Hoffman, secretary. Morning activities are scheduled for the Beltsville research center and the afternoon will be spent at the plant introduction garden at Glendale.

### OHIO SUMMER MEETING.

The summer meeting of the Ohio Nurserymen's Association will be held Thursday, August 29, at North Perry park, Painesville.

The program as planned for by the Lake County Nurserymen's Association will include a buffet luncheon at noon and in the afternoon ball games, horseshoes, croquet, tennis, swimming and boating. In the

evening, a family style dinner will be served at 6:30 at a cost of \$2 per head, plus tax.

Friday, August 30, a nursery tour has been arranged for those who wish to visit the nurseries of Lake county.

The Parmlee hotel has agreed to cooperate in every way to accommodate the members of the association at this time.

John D. Siebenthaler, Sec'y.

### VIRGINIA PLANS.

Plans have been made to hold the annual meeting of the Virginia Nurserymen's Association, August 11 to 13, at the Hotel Patrick Henry, Roanoke.

A committee composed of H. B. Wharton, Blue Ridge Gardens, Roanoke, chairman; J. W. Wharton, Hedge Lawn Nursery, Roanoke; S. N. Cook, Little Tree Nursery, Roanoke, and J. B. Yeatts, Yeatt's Nursery, Martinsville, has worked out the details for the meeting.

Registration will be held on the afternoon of August 11, with committee meetings in the evening. The following day there will be a full meeting of the association. At the morning session Dr. L. C. Chadwick, Ohio State University, will be guest speaker, and there will also be a discussion on "The Principles and Practices of Soil Conservation." Following the election of officers in the afternoon, G. W. Underhill, entomol-

ogist at the state experiment station, will speak, and a round-table discussion will be led by Dr. Chawick. At 6:30 in the evening will be a banquet. The present plans for August 13 are to leave at 9 a. m. for a trip to the experiment station at Blacksburg. In case of unfavorable weather, an alternate program will be planned.

Through the courtesy of Owen G. Wood, Wood-Howell Nurseries, Bristol, an outstanding exhibit of the display ground plans of the National Landscape Nurserymen's Association contest will be sent to Roanoke for the meeting by Secretary Harold E. Hunziker, Niles, Mich.

### MICHIGAN SHORT COURSE.

The Institute of Short Courses, Michigan State College, East Lansing, is offering a 2-year training course in nursery and landscape management especially planned by a joint committee from the Michigan Association of Nurserymen and the college faculty to provide training for persons to become foremen or proprietors of nurseries; superintendents of parks, cemeteries, private estates and various other public and private institutions; plantsmen and propagators for nursery and landscape construction firms; grounds and maintenance services, and general horticultural services.

Beginning September 27, the course will consist of four 12-week terms of resident work at the college and a minimum of two 6-month periods of practical paid placement training under college supervision. Certain fundamental courses are required

## Roses for Fall 1946 and Spring 1947

We will have to offer a limited quantity of **2-year field-grown roses**, budded on Japonica Multiflora, popular varieties.

This Corporation has been reorganized and is in a position to give you service you expect. A new storage building for the handling of our roses is under construction.

Your inquiries solicited.

### OZARKS PLANT FARMS, INC.

530 South Kimbrough

A. B. McCoy

E. McCoy

Springfield, Mo.

M. (Mack) Semple

# SURPLUS STOCK

Shipments from July 15 on.

## SIBERIAN IRIS

Bob White  
Dragonfly  
Llewellyn  
Papillon  
Pigmy  
Skylark  
Lady Northcliffe

Caesar  
Emperor  
Mrs. Gray Hill  
Peggy Perry  
Coreana  
Summer Sky  
Snow Queen  
Kingfisher Blue

Butterfly  
Geo. Wallace  
Nora Distin  
Perry's Blue  
Periwinkle  
Skyrocket  
True Blue

\$7.50 per 100, \$50.00 per 1000, 250 at 1000 rate.

## AUTUMN-FLOWERING IRIS

Autumn Elf, Autumn Haze, Black  
Magic, Eleanor Roosevelt, Sangreal  
\$10.00 per 100; \$90.00 per 1000

## HEMEROCALLIS

Fulvax and Gold Dust  
\$6.00 per 100; \$50.00 per 1000

## DELPHINIUM

Hybrid Strain, 2-yr.-old clumps  
available July 15  
\$20.00 per 100; \$150.00 per 1000

## LYCHNIS CHALCEDONICA

\$10.00 per 100

## SALVIA AZUREA

\$10.00 per 100

## COREOPSIS

Mayfield Giant and New Gold  
\$6.00 per 100

## TRADESCANTIA

Virginiana, J. C. Weguelin, Summer Snow  
\$15.00 per 100

Cash with order please, No C. O. D.'s.

**EMIL A. WITTMAN**

**Clifton, N. J.**

of all students, but the remainder of the program provides opportunity for specialization in such fields as propagation, management, landscape construction and maintenance. Those satisfactorily completing the course will be given a certificate.

The course is especially recommended for veterans. Inquiries should be sent to the Institute of Short Courses, Michigan State College, East Lansing.

### MONUMENT NURSERY.

Living trees stand as a memorial to men and women who dedicated their lives to trees, at the Monument Nursery, Monument, Colo. At this nursery, maintained by the United States Forest Service, trees are grown for planting on devastated areas in national forests and for shelterbelts and windbreaks on farms.

In 1921 a plot of ground at the nursery was set aside and dedicated for the planting of trees in memory of those employees of the forest service of the Rocky mountain region who had died. Thirty trees were planted at that time, five in honor of forest officers who lost their lives in World War I. Today there are sixty Colorado spruces in the grove, each appropriately marked.

## "IT'S JUNE BUDDING TIME"

Our Seedlings and Grafts are sufficiently advanced to permit an intelligent quotation on all Fruit Stock for the 1946-47 season, and we would make some favorable prices on some early contracts.

We would welcome a few contracts on Apricot, Plum and Peach. We have a dependable bud source and will use extreme care in keeping our stock as described.

Thanks for the nice compliments on our stock last year. We will do our best to serve you well again.

## FARMERS WHOLESALE NURSERY

Paul Patterson, Owner.

P. O. Box 65

Smithville, Tenn.

"YOU GET WHAT YOU BUY"



# New Books and Bulletins

## APPRAISAL OF BURBANK.

During his lifetime Luther Burbank and his plant-introductions were the subject of partisan controversy which has continued years after his demise. His flair for stimulating adulatory articles in the popular press was probably responsible for much of the skepticism with which his plant-breeding achievements were met by scientists and many commercial plantmen. Little attempt has hitherto been made to reach an unbiased appraisal of his work.

On that account, and because of the very human presentation, "Luther Burbank, A Victim of Hero Worship," is an interesting volume of over 200 pages, being number 5-6 of volume 9 of *Chronica Botanica*, just issued by the *Chronica Botanica Co.*, Waltham, Mass., in paperbound form at \$3.75. The author is Dr. Walter L. Howard, emeritus professor of pomology at the University of California and late director of the college of agriculture of that institution at Davis, Cal. Readers may recall a recent review of his bulletin, "Luther Burbank's Plant Contributions," published by the University of California agricultural experiment station.

Dr. Howard began in 1932 to compile a list of Burbank's plant introductions. The task lasted ten years, in the course of which he accumulated a great amount of information on Burbank's career, his character, his methods, his associates and events of his life. He found the explanations of various things which had intrigued him, as well as others, and these he set down in this volume.

This human interest story of Burbank is not, the author explains, an attempt at a conventional biography. His aim has been to explain and clarify some of the principal episodes of Burbank's life. So in a series of rather unrelated chapters are set forth the data found in print or learned from conversation with many of Burbank's old associates on Burbank the man, the nurseryman, the scientist, the egoist, the mentor of youth, etc., with a final summary of Burbank's place in the hall of fame. The serious, the ridiculous, the admirable, the petty—the various sides of the man are exhibited, in the attempt to arrive at a reasonable explanation of why this man aroused the emotions he did. The book is an achievement of biographical research, told most interestingly.

Included also is a summary of Bur-

bank's products, taken from the technical bulletin mentioned above.

## BOOK ON GERANIUMS.

Why a plant so popular in use and diverse in form as the geranium has not before received the attention of those who write garden books is a puzzling question. Now a volume in popular vein has appeared, "Geraniums (Pelargoniums) for Windows and Gardens," by Helen Van Pelt Wilson, just published by M. Barrows & Co., at \$2.75.

Entertainingly written for the amateur by this capable author of "Perennials Preferred" and other volumes, this book is valuable to the commercial grower interested in its subject. Much research in the history of the geranium has been done. Considerable data on varieties are presented, including a 35-page list of species and selected varieties of pelargoniums (the botanical and inclusive name of these plants).

The common commercial varieties receive less attention than those unusual in form, flower or foliage color. These should appeal to some growers seeking novelties for the trade. Indoor culture by the amateur is covered pretty thoroughly, with additional advice on propagation and data on insects and diseases.

While a book that obviously represents so much work and enthusiasm

on the part of the author as this one merits better paper and color printing—the black and white illustrations are good—one must recognize the difficulties of the time and accept publication now in this form rather than further delay in the appearance of a volume on this deserving and widely popular plant.

## HARDY CHRYSANTHEMUMS.

"Hardy Chrysanthemums," by Alex Cumming, published by the American Garden Guild, Inc., and Doubleday, Doran & Co., Inc., at \$2.50, is a revised edition of the book of the same name and author, published by McGraw-Hill Book Co. in 1939. The present edition is considerably enlarged, having 202 pages, as compared with 168 in the old one, and an addition of twenty-four pages of illustrations, making a total of forty-four pages. The chapters on garden culture and hardy mums in the garden have been changed and enlarged and the list of recommended varieties enlarged and brought up to date.

## METHYL BROMIDE DATA.

"Chamber for Fumigating Plants with Methyl Bromide—Construction and Operation," circular 93, just published by the Alabama agricultural experiment station, Auburn, will be of particular interest to southern nurserymen.

The publication is authored by Dr. L. L. English, formerly entomologist

## EVERGREENS

We have some nice stock on the following:

### CONIFERS

Pfitzer, English, Irish, Sabina, Tamariscifolia Junipers; Pisifera, Plumosa, Aurea, Squarrosa Veitchi Retinospora; Globe and Woodward Arborvitae.

### BROAD-LEAVED

Abelia, Dwarf Box, Cotoneaster, Euonymus Patens, Ilex and Ligustrum in great variety, Magnolia Grandiflora, Pyracantha Lelandi, Viburnum Rhytidophyllum.

### SHADE TREES, SHRUBS, FRUIT TREES

Send list for special pricing.

Our 104th season. Experienced, Progressive, Dependable.

LINDLEY NURSERIES, INC.  
Greensboro, N. C.

## TAXUS

With J. B. certificate; in carload or truckload lots only.

**TAXUS cuspidata**, (spreading) 1½ to 2 ft., 2 to 2½ ft., 2½ to 3 ft.

Also a limited quantity of **TAXUS intermedia nana**, **hicksi**, **hatfieldi** and **capitata**.

**BULK'S NURSERIES**  
Babylon, L. I., N. Y.

# ASPARAGUS, 2-yr. No. 1

WASHINGTON and PARADISE varieties.

Write for special prices on large quantities.

## CALIFORNIA PRIVET

2-yr., in grades, well grown stock.

## ARBORVITAE • JUNIPERS • YEWS

(These items available, but limited in some sizes.)

Good assortment in SHRUBBERY and SHADE TREES.

New wholesale trade list ready for mails September 1.

## THE WESTMINSTER NURSERIES

Westminster, Maryland

on that station's staff, and G. F. Turnipseed, entomologist of the Alabama state department of agriculture and industries.

The report is based on research work done by the Alabama agricultural experiment station with methyl bromide fumigation. The chamber has a usable floor area of about twenty-seven square feet, which can be increased to about 108 square feet by using three removable decks for fumigating small plants.

The circular lists required materials and special equipment; it describes construction and how the chamber is operated. Included are the recommended dosages at 1½-hour and 2½-hour exposures, and the lists of plants not injured, partially injured and seriously injured by methyl bromide fumigation. The publication is fully illustrated and contains twenty-four pages.

A copy of the publication may be obtained by writing M. J. Funchess, Director, Alabama Agricultural Experiment Station, Auburn, Ala.

### CARBON DISULPHIDE.

Carbon disulphide, a clear volatile liquid that readily vaporizes to produce a gas highly toxic to plant tissues when injected beneath the soil surface, is recognized as a most ef-

## OUR HALEGOLD PEACH

We have been propagating this peach for about eight years. It has been planted by many experiment stations and many large peach growers, and everywhere it has proven its superiority over all other peaches at its time of ripening. It ripens along with the Elberta, but will hang on ten days longer and then ship perfectly. It has the size (20 per cent larger than well grown Elberta), color, flavor; is an extra-good grower, uniform bearer, perfectly free and yellow; in fact, it does not have a single breaking-down point and will bring big money when all others fail.

If interested, write us for further information and remember that the early bookers have the best chance, as it is hard to grow enough of this variety to take care of the coming demand.

We also grow the Dixie Red, Dixie Gem, Red Haven and all the best, new and standard varieties of the peach.

## S. M. PHILLIPS NURSERY CO.

S. M. Phillips, Mgr.  
SMITHVILLE, TENN.

## STRAWBERRY PLANTS

Missionary  
Blakemore  
Klonmore  
Klondike  
Aroma

Tennessee Supreme  
Gem Everbearing  
Mastodon Everbearing  
Evermore  
Streamliner

Grown on the Cumberland plateau.

Write for wholesale price list.

Office and Packing House at the farm. On Highway 30, 7 miles west of Dayton.

## ROMINES PLANT FARM

Route 3

Dayton, Tenn.

fective and valuable herbicide for controlling deep-rooted perennial weeds, especially in early stages of infestation.

Studies made on the movement of carbon disulphide vapors in the soil, air flow and permeability in field cores by the California agricultural experiment station, at Berkeley, are described in its bulletin No. 693, entitled "The Herbicidal Use of Carbon Disulphide," by H. A. Hannesson, R. N. Raynor and A. S. Crafts, and aims to describe the various factors which determine the effectiveness of the chemical, to show its practical uses, dosages and methods of application, as well as to point out certain limitations.

Carbon disulphide can be applied at almost any stage of crop production, although summer is the best season; it leaves no poisonous residue to crops or the soil, and the land can be returned to use in a minimum of time. Because of its expense, however, this method of weed eradication is seldom justified in large-scale control programs, but prompt use of carbon disulphide is recommended to prevent the spread of small infestations; for cleanup after large-scale cultural or cropping programs, and for general use in gardens, nursery and landscaped areas.

#### BULLETINS RECEIVED.

"Landscaping the Farmstead," by Leon C. Snyder, bulletin 250, of the agricultural extension service of the University of Minnesota, gives information on planning home grounds, yard maintenance and woody plant materials for farm homes. Landscape plans and correct methods of plant care are illustrated by diagrams and photographs.

The propagation and artificial dissemination of the causal organism of the milky disease of Japanese beetle larvae have been conducted on a wide scale as a result of the early work which demonstrated the feasibility of such methods in reducing the population of Japanese beetle grubs in tested areas. Studies of the fundamental biological aspects of the host-parasite relationships, particularly those concerned with the mode of infection, the pathogenicity of the disease organism and the factors which affect the bacterium and its transmission from host to host, are reported in bulletin 491 of the Connecticut agricultural experiment station, New Haven, entitled "Studies of the Milky Disease of Japanese Beetle Larvae," by Raimon L. Beard.

Spray programs for controlling the codling moth, orchard mite, aphids and scale, the major orchard pests

### The Large Cultivated

## BLUEBERRY PLANTS

6 to 12 ins., 12 to 18 ins., 18 to 24 ins.

Well branched, heavy rooted, bearing-size plants.

**Cabot, Jersey, Rancocas, Rubel, Pioneer and Concord varieties.**

Let us quote on your requirements.

## ASPARAGUS PLANTS

1 and 2-year.

## STRAWBERRY PLANTS

And other small fruits.

Let us quote on your requirements.

## BOUNTIFUL RIDGE NURSERIES

Princess Anne, Md.

### The Homestead Nurseries

H. G. Benckhuysen. **BOSKOOP, Holland**

QUALITY STOCK ONLY.

CONIFERS  
PEONIES  
SHRUBS  
PHLOX  
AZALEAS  
RHODODENDRONS

APPLY FOR PRICES.

### Holland - Grown Nursery Stock

Shrubs and Trees,  
including liners.  
Rhododendrons and Azaleas  
Hardy Perennials  
Peonies

NOVELTIES IN ALL LINES.  
Ask for wholesale catalog.

**F. J. Grootendorst & Sons**

Boskoop, Holland  
Growers and exporters since 1903.

### GULDEMOND & CO.

Boskoop, Holland

Offer soil-free plants of all descriptions for the 1946-47 shipping season. Ask about *Lilium Speciosum*, *Astilbe*, *Azalea*, *Rhododendron*, *Shrubs*, *coniferous* and *deciduous*.

Send inquiries to: GULDEMOND'S,  
Broadway Station, Newport, R. I.

Nursery Stock at  
Wholesale Only.



**ARTHUR DUMMETT**

Bernardville, N. J.

**BULK & CO., Nurserymen,**  
of BOSKOOP, HOLLAND

Experienced Exporters of Nursery  
Stock since 1914.

ASK FOR CATALOG



# SCARFF'S Nursery Berry Plants



**PLACE YOUR ORDER NOW  
BE ASSURED OF A SUPPLY**

## BLUEBERRIES

Red Raspberries  
New Bristol Blackcap  
New Morrison Blackcap  
Sodus Purple Raspberry

Boysenberries  
Thornless and Regular  
Tips and Transplants  
Nectarberries  
Youngberries

Currants — Grapes — Blackberries

## GARDEN ROOTS

Linnaeus Rhubarb  
MacDonald Red Rhubarb  
English Broad-leaved Sage  
Horse-radish  
Whole Roots and  
Cuttings

## ORNAMENTALS

Silver-lace Vines  
Euonymus Coloratus  
Buddleia Charming  
Shrubs in variety

**SEND US YOUR COMPLETE WANT LIST  
FOR OUR LOWEST PRICES**

**W. N. SCARFF'S SONS**

**New Carlisle, Ohio**



of eastern Washington, are described in bulletin 279 issued by the agricultural extension service at Washington State College, Pullman, Wash. A spray chart is included for keeping accurate records of an entire season's spraying.

The pollination of tree fruits and nuts is the subject of bulletin 342 of Washington State College, prepared by John C. Snyder, extension horticulturist. With a brief description of insect pollination, the booklet concentrates on hand pollination methods, from collecting the pollen to curing and applying it.

"The Home Lawn," bulletin P80 of the Iowa agricultural experiment station, at Ames, gives all the necessary steps, from the preparation of the seedbed to the eradication of weeds, for building and maintaining a good home lawn. Simple directions are given by the authors, H. L. Lantz, L. C. Grove and E. P. Sylwester, for draining, watering, seeding, fertilizing, rolling, mowing and weeding. In addition to several photographic illustrations, there are a grass seed table and a fertilizing schedule.

FLORADALE, formerly at Los Angeles, Cal., is now located at Long Beach, Cal.

## LINERS and FINISHED MATERIALS of

**EVERGREEN & DECIDUOUS ORNAMENTALS.**

•  
**INTRODUCERS of JUNIPER GLAUCA HETZI**  
•

We grow in quantity and keep our prices reasonable.

**FAIRVIEW EVERGREEN NURSERIES**

Fairview, Pa.

## WANTED

- 5 Carloads of cash-and-carry size Evergreens.
- 1 Carload of Azaleas and Rhododendrons.
- 1 Carload of Magnolia, small flowering trees, etc.
- 1 Carload of Blue Spruce.

We have a large sales outlet for nursery stock. Kindly advise us if you have stock to sell.

**OLD ORCHARD GARDENS**

724 E. Big Bend Road

Webster Groves, Mo.

## NATIONAL MAIL ORDER ASSOCIATION MEETS.

[Continued from page 13.]

sizes are quite scarce and grafted plants almost unobtainable. Some mail-order catalogs do not list evergreens, he said, and this would be a poor time to start, in view of the shortage of supply, but homeowners desire this class of plants, and within the next two or three years they should be added to all mail-order catalogs. He thought wholesale prices on evergreens would range from ten to twenty per cent higher.

For the shade tree committee, Tom Kyle, Bohlender Nurseries Co., Tipp City, O., said there was a fair supply in 2-inch caliper and up for landscape planting, but he questioned whether there was an adequate amount in the smaller mail-order sizes.

Reporting on perennials, Henry Weller, Weller Nurseries Co., Holland, Mich., called attention to the many new growers who had entered the business in the past year or two and the current enormous interest in perennials. He urged attention to the new varieties in phlox, garden chrysanthemums, etc. Returns from a questionnaire sent to perennial growers indicated an increase in costs of labor and supplies amounting to thirty-five or forty per cent; consequently, prices must rise. Phlox and many items in large supply last year will be plentiful again, but the indications are that items which were short will be no more plentiful the coming season. There is a heavy demand from florists for perennials for cutting. In conclusion, Mr. Weller warned of the scarcity of wrapping paper and twine, and urged shippers to seek their needs as early as possible.

Committee reports at the Saturday morning session began with that on small fruits headed by Howard Scarff, W. N. Scarff's Sons, New Carlisle, O. He called on Rex Westhauser, Sawyer, Mich., for boysenberries and blackcap raspberries, who indicated that supplies were not too great of either and prices would be about the same as last year. Dick Krieger, Bridgman, Mich., thought the supply of blueberries would be somewhat smaller; blackberries, grapes and purple raspberries probably sufficient, and asparagus about the same as last year. He said the weather conditions would make the decision as to whether there would be a normal supply, if the summer is favorable, or a short supply if it is not. C. H. Andrews, Fari-bault, Minn., thought the supply of red raspberries and currants would be

adequate and rhubarb would be in normal supply.

In summary, Howard Scarff said that small fruit plants would probably be adequate for the demand from home gardeners, but not enough to meet a demand from commercial growers, which demand should soon appear. He thought prices on the various items would be about the same as last year, except that black raspberries might be lower.

In the absence of Earl Ryno, Wayland Dahlia Gardens, Wayland, Mich., kept home by illness, B. F. Kindig, Elkhart, Ind., said that dahlias were sold up about as last year, with no greater supply in prospect.

Reporting on strawberries, Victor Judson, Judson Wholesale Nurseries, Bristol, Ind., thought the supply adequate of varieties except Premier, which might be insufficient. Prices would approximate those submitted in the east last year and again this year, though some thought a slight reduction in the everbearers was called for.

On roses, H. A. Timmons, Buntings' Nurseries, Inc., Selbyville, Del., said a questionnaire indicated a national production about sixty per cent of the 1942 figure. California and New England report nearly ninety per cent of the earlier year, but other sections, on the Pacific northwest coast and in the east, were below average. As to Texas roses, Hugh Wolfe said that the crop this year was the worst yet. Though a large quantity was budded last year, the survival has been at a low rate and unfavorable weather has handicapped the growth, so that somewhere around 8,000,000 bushes will constitute the crop.

J. J. Pinney, Willis Nursery Co., reported an excellent return from members on a questionnaire about shrubs. The trend was reported to be toward an increased demand for shrubs and for better varieties. Reports indicated a supply approximately the same as last year. While the majority thought current prices were sufficient, about one-third of those reporting thought prices should be about twenty per cent higher to cover costs.

Reporting on gladiolus bulbs, Harold Goldstein, Kunderd Gladiolus Farms, Goshen, Ind., said an increase of from fifteen to twenty per cent in the production of gladiolus bulbs might be expected through GI's and others putting in the planting stock available late last spring for a quick profit. The demand for Picardy and Minuet will be strong, while other varieties will carry about the same price as last year. Growers are try-

# FALL BULBS

IMPORTED  
DIRECT FROM HOLLAND

TULIPS  
HYACINTHS  
NARCISSUS  
CROCUS  
SNOWDROPS  
SCILLA

Send for Price List

**WILLIS NURSERY CO.**  
Ottawa, Kansas  
Wholesale Nurserymen

# LANDSCAPING MASTER UNITS

Series No. 2 of Service Charts  
Ready August 15, 1946.

Second book of a series of three covering the whole field of Landscaping Costs. Private and Public Projects, \$5.00 to \$500,000.00.

Digging, delivery, planting, maintenance, guarantee, overhead and many other operations.

Numerous charts, tables, examples.

## A VALUABLE GUIDE

For Nurserymen  
Landscape Contractors  
Landscape Architects

Price \$3.00 per copy.

## ESTIMATING CHARTS

Series No. 1.

A ready reckoner for quantities of topsoil, manure, humus, etc. Ball sizes, weights, areas, etc.; tree pits, excavation, displacement, horse trenches, lawn areas, designs.

Still available at \$2.00 per copy.

**JOHN SURTEES**  
Ridgefield, Conn.

# DELPHINIUM

New crop Delphinium seed will be ready for shipment in late July.

## GIANT PACIFIC HYBRIDS.

**Blue Bird Series.** The clearest of medium blues with white bee. 2½-in. flowers.

**Galahad Series.** The finest clear white Delphinium we list. Huge, double flowers borne on long, closely set spikes.

**Black Knight Series.** Deep midnight violet. The darkest of them all.

**Blue Jay Series.** A brilliant true medium blue with dark bee.

**Cameliard Series.** A pure lavender with white bee. Very attractive.

**Round Table Series.** Hybrid or "trial ground mixture," containing many new and interesting color types not yet introduced.

**Guinevere Series.** Fine, light pinkish-lavender with white bee.

**King Arthur Series.** Royal violet with white bee. Exceptional flower size.

**Summer Skies Series.** Light blue with an attractively contrasting white bee.

Prices on varieties at left, each:

Tr. pkt., \$1.25; ½ oz., \$2.50; ¼ oz., \$4.00; 1 oz., \$14.00.

**Clear White.** A very fine clear white, large double-flowered hybrid Delphinium.

**Blue Shades.** One of our most popular strains. Mixture of light, medium and dark blue strains.

**Lavender Pastel Shades.** Mostly two-tone lavender combinations with brown or black bees.

**Violet Shades.** Deep, rich violet-blue colors with many contrasting white bees.

**Mixture.** A complete mixture of all colors in this fine hybrid type. Our finest Hybrid Delphinium strain.

Prices on above four varieties and mixture, each: Tr. pkt., \$1.00; ½ oz., \$2.00; ¼ oz., \$3.50; 1 oz., \$12.00.

## OTHER VARIETIES

**Gold Medal Hybrids.** Tr. pkt., 25c; ¼ oz., 50c; 1 oz., \$1.75.

Write for prices on quantities.

**Belladonna Improved.** A carefully re-selected strain of this standard light blue. Tr. pkt., 35c; ¼ oz., 95c; 1 oz., \$2.85; 4 oz., \$10.00; 1 lb., \$35.00.

**Lamartine.** Deep, bright marine blue with white eye. Outstanding for color and cut flower habit. Tr. pkt., 50c; ¼ oz., \$1.35; 1 oz., \$4.75.

**Bellamosum Improved.** A reselected strain of this standard deep blue. Tr. pkt., 35c; ¼ oz., 95c; 1 oz., \$2.85; 4 oz., \$10.00; 1 lb., \$35.00.

**Belladonna.** The original or regular strain. Tr. pkt., 30c; ¼ oz., 70c; 1 oz., \$2.20.

**Blackmore and Langdon Hybrids.** Shades of blue with contrasting bees. A fine free-flowering, hybrid strain. Tr. pkt., 35c; ¼ oz., 90c; 1 oz., \$2.70; 4 oz., \$9.00.

**Wrexham or Hollyhock Strain.** Extra-large, tapering spikes. Long blooming period. Tr. pkt., 50c; ¼ oz., \$1.60; 1 oz., \$5.50.

*"<sup>BETTER</sup> Flower Seeds for Florists"*

*Gro. J. Ball*  
INC.  
WEST CHICAGO,  
ILLINOIS, U. S. A.

ing out the new Holland varieties and hope for something which will be more disease-resistant than Picardy. Gladiolus growers report labor high-priced and scarce. He expected no surplus of bulbs in early spring of 1947 and only possible in late spring.

A. M. Grootendorst, Benton Harbor, Mich., reporting on fall bulbs, said that tulips imported from Holland would be plentiful, but the Netherlands government permitted the sale only of the two top sizes. Smaller sizes for mail-order trade are available in this country, however. Hyacinths from Holland may possibly be short. Crocus bulbs will be plentiful, and miscellaneous small bulbs will be adequate either in this country or in Holland. Lily bulbs will still be short in supply, except possibly the regal lily.

Reporting on fruit trees, John Kelly, Kelly Bros. Nurseries, Dansville, N. Y., said that apples were scarce in the east in 2-year size and light in stands in 1-year, though more plentiful in the west. Cherries are scarcely available in 2-year size and the 1-year crop is not too good on account of the unusual weather, while the quantity in the west is about as last year. Plums are few in the 2-year size, probably as

## WE OFFER FOR FALL SHIPMENT

Flowering Shrubs, Tree Seedlings, Shade Trees, Vines, Ferns, Tree and Shrub Seeds, Evergreens and Cut Holly for Christmas Decoration.

After eighteen years in business we are able to offer you nursery stock in large quantities. We can also furnish many more varieties this time than heretofore, so we have decided to shoot both barrels this time, hit or miss.

If you are interested in good clean nursery stock for fall, ask for our trade list which will be ready by August 1.

**O. H. PERRY NURSERY CO.**

Box 545

McMinnville, Tenn.

### FIG

"Coldproof" New Delta  
Bears first year.

### PECAN

Largest known.

### PANSY

Jumbo Giant, 3 to 5-in. blooms.

**NEW DELTA NURSERY**  
Jackson, Miss.

## STRAWBERRY PLANTS

Streamliner	Minn. 1166
Brunes Marvel	Gemzeta
	Gem

Our 27th Year

**DOLLAR NURSERY**  
Bloomfield, Ia.



scarce as last year. Peaches show not too good a stand in the east, but better in the west. Pears are scarce in 2-year size, scarcer than last year. He thought that prices would go up on account of the considerably increased costs. The surplus in fruit trees the past spring was not at wholesale, but consisted of stock left over in retail hands on account of strikes, spring weather and local conditions.

Harold Goldstein presented some preliminary figures from a questionnaire sent out to members in an attempt to compile statistics about packages mailed and postage paid in the event that representation needed to be made to avert rate increases. He hoped for additional returns from the members so as to make the figures a more adequate representation of the national organization.

### NEW THINGS IN PLANT SCIENCE.

[Continued from page 14.]

will delay fruiting and give large apple trees. He is finding that certain seed stocks are inferior for the production of nursery seedlings. He knows that there is something more than theory in bud selection and that there is a fundamental difference between budwood taken from one McIntosh tree as compared with another. Yet the whole nursery field, which is fundamental to a sound fruit industry, has been somewhat neglected. How is it that fruit trees of some varieties store well in nursery cellars over winter and others do not? What is the best way to get plants off to a good start? When the fundamentals of these problems are worked out, the rewards will be substantial.

More recently, some extraordinary responses have been secured with the so-called growth-regulating substances—organic compounds which alter the performance of a plant profoundly when applied in small amounts. Some of these substances, and they appear to be numerous, are producing amazing responses. Apple fruits have been held to the tree long after regular picking dates. Apple blossoms have been thinned in spring with three-thousandths per cent of naphthaleneacetic acid. Tomato plants have been made to set fruit by applications of minute quantities carried in gas. The ripening of fruits has been speeded by some of them and retarded by others. The blooming of apples has been retarded with three-hundredths per cent naphthaleneacetic acid. Weeds have been stimulated to grow themselves to death with 1,000 parts per million

of 2-4 dichlorophenoxyacetic acid. Transplanting of hardwood trees has been favored with soaking in indolebutyric acid at 20 ppm. Cuttings have been made to root more readily with indolebutyric acid. Apple scald has been reduced by dipping the fruit in 50 ppm of indolebutyric acid in lanolin emulsion. Many possibilities remain to be studied, and when the fundamentals are worked out, the horticultural engineer will have some valuable new tools at his disposal.

As for insect and disease control, the days solely of lime-sulphur, Bordeaux mixture and arsenate of lead are past. Now come the new organic insecticides and fungicides. PDB for peach borer control was an important step. DDT for insect control is one of the marvels of our time. Elgetol and the di-nitro compounds have proved very effective. Puratized has suggested promise in control of apple scab. New organic compounds are literally flooding the testing laboratories of the country. The biological control of insects by means of parasites, as the Oriental fruit moth, is an accomplished fact. Methyl bromide gas has proved an effective rodent control in cold storages. But for every fact now known and every new compound tried, a hundred await solution or demand attention.

Why apply these materials in water? Why cart around 500 gallons of water to apply a few pounds of active ingredients? It is the time-honored way, but why must it continue? DDT has been applied in a gas from a 1-pound cylinder. Apples have been held to the tree in fall by application from a 1-pound cylinder of growth regulators dissolved in a liquefied gas. The airplane, the helicopter and undreamed of equipment are near.

So closely entwined with production as to be scarcely separated from it are marketing, merchandising, canning, freezing and utilization in a hundred ways. How limited is our knowledge for scientific investigation about consumer preferences, nutritive values, new outlets and uses. No one in the horticultural industry needs to have these possibilities and needs called to his attention. They are so impressive that any recital becomes an understatement.

But to acquire new knowledge requires three things, principally, (1) men of imagination who are well and technically trained, (2) moral and material backing and (3) uninterrupted time and energy. Make no mistake, research is expensive, research demands the best in technical skill and equipment, and research re-

### The lovely

Yellow

Rose

V for Victory

and other

### SUB-ZERO HYBRID TEAS

Large and beautiful as any.

Easy to grow and long to live.

Save replacement expense.

Also Yellow and Orange Climbers.

Write for trade prices to

**BROWNELL ROSES**

LITTLE COMPTON, R. I.



### PROTECT valuable young TREES

from {Bark-Eaters  
Sun-Scald

- This tough fibre guard locks on in two seconds.
- Lengths—24" and 30".
- Counter display and sales folders available.
- Write us for samples and selling discounts.

LAMINITE PRODUCTS • CANTON 5, OHIO

### GLADIOLUS BULBS

By the 100, 1000 or Million.

We grow the following standard commercial varieties in quantity:

Aladdin	Marg. Fulton
Algonquin	Marg. Beaton
Beacon	Peggy Lou
Corona	Picardy
Gardenia	Maid of Orleans
Bit o'Heaven	Snow Princess
Blaze	Vagabond Prince

We also grow many of the newer varieties, such as White Gold, Red Charm, Stoplight, Elizabeth the Queen, Leading Lady, Buckeye Bronze, Golden Teton, Van Gold and many others.

Catalog ready in December. A postal card will put your name on our mailing list.

**CUTLER & VENNARD NURSERY**

Box 394

Sioux City, Ia.

### KOSTER NURSERY

Division of Seabrook Farms

Wholesale Nurserymen

BRIDGETON, N. J.

\*\*\*\*\*

Write for wholesale price list of lining-out and specimen stock in better evergreens and shrubs.

**BOBBINK & ATKINS**

Nurserymen and Florists

*America's Leading  
Specialists in:—***Forcing Azaleas****Deciduous Azaleas**

including the best named varieties of Mollis, Pontica and Rustica

**Hybrid Rhododendrons**

20 leading varieties

**Texas**

many varieties and sizes

**Vines**

Headquarters for English Ivy

**Perennials and Roses**

in varieties not obtainable elsewhere

*Write for Catalog*

Paterson Ave. E. Rutherford, N. J.

**LINING-OUT STOCK  
OUR SPECIALTY . . .**

Shade Tree Whips . . . a timely finished product saving 2 to 4 yrs. growing effort . . . excellent variety.

A very complete line of  
**ORNAMENTAL TREES, SHRUBS  
and EVERGREEN SHRUBS,**  
including many scarce items.**THOMAS B. MEEHAN CO.**  
DRESHER, PA.**HESS' NURSERIES**Mountain View,  
New Jersey**Evergreens****Barberry****Privet**

Write for wholesale price list.

**GARDNER'S NURSERIES**

Rocky Hill, Conn.

quires undivided energy, free from diversions. That the investment returns real and certain dividends is no longer questioned. It is solely a question of "what do we want and how much can we afford to get it."

**OKLAHOMA SHORT COURSE.**

A short course designed to provide basic training in nursery work for those just entering the field or for those wishing to review phases of this work has been started at Oklahoma A. & M. College, Stillwater, according to announcement sent to all nurserymen in the state by Leo Conard, secretary of the Oklahoma Nurserymen's Association. The course will consist of three meetings during the year, each devoted to various practices of propagation and nursery management. The first of these was held July 1 to 3.

The first day's meeting covered T-budding, layering and seedbed management and was conducted by Dr. Michel Afanasiev, of the department of horticulture. The morning of the second day Dr. W. W. Ray, of the department of botany and plant pathology, explained the nature of plant diseases, how to recognize them and their specific control. The afternoon session was entirely devoted to the study of insects and their control, with Dr. Fred E. Whitehead, of the department of entomology, in charge. At the final session Prof. Herman A. Hinrichs, of the department of horticulture, led a class in spraying and dusting and Dr. Afanasiev explained softwood cuttings and the use of chemicals in propagation.

A fee of \$10 was charged for the course, and the local Veterans' Administration said the government would pay the fee for any veterans taking the course. Sleeping accommodations were provided at a minimum cost by the college.

**MORE GRAPES IN EAST.**

Through the joint efforts of the Welch Grape Juice Co. and the National Grape Cooperative, 18,000,000 Concord grape cuttings have been planted in the grape belt area around Westfield and Brockton, N. Y., and North East, Pa.

From these 18,000,000 grape cuttings, between 5,000,000 and 8,000,000 new roots will have developed by next fall and spring for planting in the grape belt and other areas. This in itself represents an acreage expansion of some twenty-five per cent.

The grape cutting projects and building expansion have been launched as a direct result of market

**LARGE STOCK—  
GOOD ASSORTMENT—  
EVERGREENS***Send us your  
list of wants  
for quotations.***OR BETTER STILL—***Come and  
See them for  
Yourself!***WILLIS NURSERY CO.**  
Ottawa, Kansas**Northern-grown Stock***Send  
for  
Price  
List.***J. V. BAILEY NURSERIES**  
St. Paul 6, Minn.**BUXUS SEMP. WELLERI**(Weller's Hardy Northern Type)  
Only Boxwood proved hardy in Northern States for Twenty Years.Ask for our Perennial catalog.  
**WELLER NURSERIES CO., Inc.**  
Leading Perennial Growers  
Holland, Mich.**NORTHERN COLLECTED EVERGREENS  
FERNS****PLANTS  
SHRUBS  
WILLIAM CROSBY HORSFORD**  
Charlotte, Vermont**ARCHIBALD ENOCH PRICE**  
"The Care of Trees"84 Park Drive  
Glenview, Illinois  
PHONE: Glenview 359

analyses made by Welch research representatives to determine the potentialities of the existing market as an outlet for increased Concord grape production.

### PRESIDENTIAL MESSAGE.

[Continued from page 10.]

nursery firms in the country which hold membership in a state or local association which are not members of the A. A. N. This is the A. A. N.'s prospect list, since we require the maintenance of membership in a local, state or regional association from all applicants.

Every state department of agriculture maintains, through its inspection department, a list of all registered nurserymen. These lists show, in the aggregate, a total of 11,895 registered nurserymen. The 1940 census records 8,056 nurserymen in the country who operated three acres or more or who did at least \$250 worth of business from a smaller tract.

It is not my view that all holders of nursery certificates are membership prospects for the A. A. N. It is my view, however, that a great majority of the 1,500 or so local, state and regional association members are prospective members of the A. A. N. and that there is a large number of nurserymen who are not affiliated with any association at present who should belong to both their state and their national associations.

It is my recommendation that a particular effort be made in 1946-47 to interest more nurserymen in the A. A. N. and its activities. I also urge each state membership chairman to work actively in cooperation with your president to this end. And finally, I urge each member of the A. A. N. to support the state chairman.

New members are the lifeblood of any organization. Benefits are mutual, but I am one of many who believe that the benefits of membership in the A. A. N., both direct and indirect, far outweigh the costs. I like the slogan, "Membership doesn't cost; it pays."

### Committees.

Before the Washington office was established, the full complement of work of the association was done by committees, on a voluntary, non-payment basis. Since 1937 there has been in many instances an attitude of "Let George do it."

I wish to take this opportunity to compliment committee members who during my administration have made progress in their assigned tasks. I also want to emphasize that, even

with a Washington office, there is still need for a continuation of the voluntary effort of committee members, to the end that progress in A. A. N. activities may be more rapid. The A. A. N. is not a one-man organization. Our growth in the past and our anticipated growth in the future call for the active voluntary cooperation of us all. Every committee chairman and every committee member should appreciate the obligation he assumes on committee work and lend his best efforts to the cooperative work of his association.

### Conservation on Nurseries.

Conservation of soil and water is a popular agricultural topic these days. I think we nurserymen are missing a bet if we do not get on the band wagon. Our company has been working for the past several months with the local soil conservation district in our county and with the technicians of the Soil Conservation Service. I am happy to say that we are pleased with the program. The men doing the work are fully qualified, and my only regret is that we did not have this help a good many years ago.

Out in our country where we raise all the corn and hogs you read about in the papers, we say a piece of worn-out land has been "corned to death." Since we have been working with our soil conservation district, we have analyzed our own operations, and I have reached the conclusion that growing nursery stock is harder on land than raising corn. All of us know of nursery land that has been worn out by hard use. Almost every nurseryman can point to sections of his nursery where the stock is now poorer or less vigorous than it was ten or twenty years ago. Our problems are the same as those of the grain or livestock farmer. We cannot move to new frontiers, and even if new land was available, in most cases we could not afford to move out physical setups. The only answer seems to be to change our ways and fight it out on the old stamping ground.

The outlook is encouraging. In our own case we are just getting started. From what we have found out already, I am convinced that we have the answer and that we can continue to produce stock at Dundee indefinitely, once we get our conservation program in full operation.

We are now just starting our field work on a part of the nursery. The plan we are developing is so arranged that we can proceed from field to field as we clean out our stock, until the whole nursery fol-

## LINERS AZALEAS AND RHODODENDRON HYBRIDS

	Each	Each
	Per 100	Per 1000
Azalea Mollis, 1 Tr.	\$0.10	\$0.09
Rhododendron Hyb., 1 Tr.	.10	.09

Ready for delivery during August or September.

Not less than 25 at 100 rate; 300 at 1000 rate. Packing Free. Cash with order; no C.O.D.

Beetle certification furnished upon request.

Finished Stock in

TAXUS  
HEMLOCKS  
AZALEAS  
HYBRID RHODODENDRONS  
AUSTRIAN PINES

(Truckload lots.)

**PALLACK BROS. NURSERIES, INC.**

R.F.D. 1, Harmony, Pa.

Rt. 19, 31 m. No. of Pittsburgh.

## DAPHNE MEZEREUM SEEDLINGS

Hardy, early-flowering type.

	Per 100
3 to 5 inches	\$ 9.00
5 to 8 inches	12.50
8 to 12 inches	15.00

## POLYANTHUS PRIMULAS

Flowering-size clumps.

\$8.00 per 100.

Everything fresh dug to individual order. Cash with order, F.O.B. Fall or spring shipment.

**WILLMOT'S**

Orillia, Ontario, Canada

## ACER PLATANOIDES—

Norway Maples

6 to 8 ft., trans., \$45.00 per 100. 6 to 8 ft., ¾ to 1-in. cal. whips, \$75.00 per 100. 8 to 10 ft., ¾ to 1-in. cal., well branched, \$100.00 per 10; \$85.00 per 100. 8 to 10 ft., 1 to 1½-in. cal., well branched, \$125.00 per 10; \$100.00 per 100.

1½ to 1¾-in. cal. (in the ground), \$150 each, plus 25¢ dug bare root. 1½ to 1¾-in. cal. (in the ground), \$2.00 each, plus 35¢ dug bare root. 1¾ to 2-in. cal. (in the ground), \$2.25 each, plus 40¢ dug bare root.

**STATE ROAD NURSERY**

Media, Pa.







Growers of a complete  
line of deciduous and  
coniferous species.

**JEWELL NURSERIES, INC.**  
Lake City, Minn

## ORNAMENTAL EVERGREENS

### Trees & Shrubs

**BAGATELLE NURSERY**  
P. O. Huntington Station, N. Y.

#### HUNTS ACME GRAFTING COMPOUND

Used for grafting or as a protective coating.

**RODENT REPELLENT** protects your trees  
against rabbits and  
other rodents.

**PARADICHLOROBENZINE** kills peach tree  
borers. Also brush  
and hand grafting wax. Send for price list.

Above products endorsed by Michigan State College

**M. J. BECK CO.,**

Successor to Hunt & Son.

Box 7 Lansing 1, Mich.

	Per 100
Azalea Kaempferi, 2 to 3 ft. ....	\$250.00
Azalea Kaempferi, 3 to 4 ft. ....	325.00
Azalea Poukhanensis, 18 to 24 ins. ....	235.00
Azalea Poukhanensis, 3 to 4 ft. ....	350.00
Enkianthus Campanulatus, 6 to 7 ft. ....	\$400.00

**BRIMFIELD GARDENS NURSERY**  
245 Brimfield Road Wethersfield, Conn.

## 50 Moerheim Blue Spruce

6 to 9 ft. in height. Many beautiful trees. Write  
for particulars. Jap Beetle certification on request.

**RALPH M. JOHNSON,**

Coudersport, Pa. R. D. 3

lows a plan of conservation farming. We estimate that it will take about seven years to accomplish the whole job, thus allowing us to ease into the program easily and without upsetting operations now under way. The assistance we have received and are receiving goes beyond the planning stage. We are getting enough help from the Soil Conservation Service to enable us to apply our plans. As I say, the approach is very practical, and I personally feel it is something we nurserymen cannot afford to miss.

The men who have been helping us are assigned to the eight midwest states comprising the corn belt. During the past several years they have worked with some of the other nurserymen in our part of the country. They tell me that up to the present time there are about 3,600 areas of commercial nurseries on which soil conservation programs have been developed and applied. One of the larger nurseries which has been in the program for about five years is the Mount Arbor Nurseries, at Shenandoah, Ia. I would suggest that you ask Harold Welch what he thinks about the idea. They tell me he is very well satisfied.

It is my considered opinion that the nursery trade must not only join, but also must exert leadership in this movement, not only for our own benefit but also for our contribution to the betterment of the country as a whole. The nursery trade has made many advances, most of which have been accomplished by the nurseryman himself. When you stop to analyze the situation, most of our improvements have been in the organization and sales end of the business. Unfortunately we cannot claim to have progressed very far out in the nursery row work. Regardless of quarantines, diseases, labor and material scarcities, and the thousands of other things that plague the nurseryman, the fact remains that soil is still our stock in trade and the foundation of our business.

As an organization we can do a great deal to make this vital movement serve us better. I hope you will think this over and after you get home contact your local district. If you do not have one in your locality, discuss the subject with the county agent or contact the Soil Conservation Service. In another year I should like to see the convention give some time to this subject, because I am sure we have in this movement a facility we have barely tapped. Dick White knows the Soil Conservation Service people well. I know they would welcome the opportunity to

## Maloney's

Offer for Fall and Spring delivery  
**2-year Standard Apple, Sweet and Sour Cherry, Plum and Standard Pear.** Also **2-year Shrubs**, bushy, well rooted, twice transplanted.

**Evergreens**, three times transplanted, properly sheared, earth balled, or moss balled. Mail us your list of wants.

We would appreciate your surplus list; we need **Roses, Berries**, certain varieties of **Ornamental Trees, Vines**, etc. Write for our surplus and want list.



**MALONEY BROS.  
NURSERY CO., INC.**  
Danville, New York

## FAMOUS CUSHION MUMS

Pink, white, red, bronze.

\$4.00 per 100, \$37.50 per 1000.

**YELLOW CUSHION and LITTLE BOB**

\$6.00 per 100, \$55.00 per 1000.

**NEW GOLD CUSHION**

\$10.00 per 100.

Big Chrysanthemum Catalog.

**WONDERLAND NURSERIES**

Ellerson, Va.

## Hardy Northern-Grown PERENNIALS

Vetterle & Reinelt

Pacific Giant Delphiniums

**NORTH POLE NURSERY**

Cornucopia, Wis.

## NOVELTY PERENNIAL and ROCK GARDEN PLANTS

Wholesale Trade List now ready

Send for your copy.

**CARROLL GARDENS** Westminster, Md.

The **CHRYSANTHEMUM  
CATALOG** you cannot afford  
to be without.

**WONDERLAND NURSERIES**  
Ellerson, Va.

find out how they could help us get a better job done.

#### Conclusion.

The past year of your president has been an inspiring and enjoyable experience. I would not accept the presidency of this organization again for a million dollars, but I would not take a million dollars for the friendships and the experiences I have had during the past year in this office. I have always had the interests of the whole trade in mind and have given my best efforts to advance the association and its work at every opportunity.

Thus endeth the reading of the sixty-second chapter of verse delivered to you by your sixty-second president.

#### LONG ISLAND MEETING.

The Long Island Nurserymen's Association met July 2 at the Bethpage state park clubhouse, Bethpage, N. Y., for a 12 o'clock luncheon and meeting.

After many meetings, the insurance committee presented a plan for group insurance of which members of the association may avail themselves. A trust indenture will be drawn up by the insurance company explaining the duties and the authority of the trustee, who must be appointed to collect the premiums from the members and turn them over to the company. Mr. Nee, of the Travelers Insurance Co., which is handling the plan for the association, was present to answer questions.

Following the meeting the Long Island chapter of the American Association of Nurserymen met for discussion and to instruct its delegate, John Visser, who is attending the convention at Miami.

#### ST. LOUIS MEETING.

The Landscape and Nurserymen's Association of Greater St. Louis held its monthly meeting June 10 at the American Legion hall, St. Louis, Mo.

The question of holding afternoon meetings during the summer months was discussed, and it was decided to hold outdoor afternoon meetings in July, August and September. A committee, composed of Reginald Wilson, Fred Larsen and Clarence McGovern, was appointed to formulate plans for these gatherings. The July meeting will be an outdoor luncheon to which the ladies will be invited.

Speaker at the meeting was Mr. McGovern, who talked on moving evergreens and deciduous plants during the summer months. He called

particular attention to such varieties as were best and cautioned the members on some which were not so good.

#### OBITUARY.

##### Carl Cropp, Sr.

Carl Cropp, Sr., vice-president and secretary-treasurer of Vaughan's Seed Store, Chicago, died June 30. He had been with the well known seed firm for sixty-two years on January 12 of this year.

Born at Erfurt, Germany, Mr. Cropp received his early training as a seedsman under his father. In 1883 he came to the United States, working for a year in the seed house of B. K. Bliss, New York. Then he moved to Chicago and went directly to Vaughan's Seed Store to inquire about a job. At the cashier's desk he found Florence Vaughan, sister of J. C. Vaughan. Nine years later he and Miss Vaughan were married.

Mr. Cropp was placed in charge of the flower seed department. When Vaughan's was incorporated in 1910, he was made treasurer. He later became vice-president and secretary.

Mr. Cropp enjoyed world-wide recognition as an authority on flowers and flower seed production. In 1938 he was presented with a trophy for outstanding achievements in horticulture by the All-America Selections Council at its annual meeting. He was especially active in the mail-order group of the American Seed Trade Association, but he also gave his close attention to almost every other phase of seedsmen's work. He kept in touch, also, with the nursery branch of the company's business.

Besides his widow, Mr. Cropp is survived by a son, Carl V. Cropp, with the seed department of Vaughan's.

#### COMPETITION FOR DESIGNS OF SMALL HOME GROUNDS.

Questions received with the numerous entries in the regional prize competition for designs of small home grounds, announced in the May 1 issue of the American Nurseryman, have reached the contest director, Harold E. Hunziker, secretary of the National Landscape Nurserymen's Association, Box 313, Niles, Mich.

A mimeographed sheet carrying the answers to these questions has been sent to each of the persons entering the competition.

There is still plenty of time to prepare plans for this contest, since it will be open until September 5. To obtain a reprint of the contest rules, with releases issued to date on an-

### FRUIT TREES SHADE TREES

### GARDEN-FLOWER SEEDS

### ALLEN NURSERIES & SEED HOUSE

Geneva, Ohio

### ORNAMENTALS TREES SHRUBS EVERGREENS

Tree and shrub seeds.

Write for wholesale price list.

### SCRUGGS NURSERY Route 7, McMinnville, Tenn.

#### CANADIAN HEMLOCKS

2 to 6 ins. in 2 -in. bands, \$9.00 per 100.  
6 to 9 ins. in 2 -in. bands, \$12.50 per 100.  
12 to 18 ins. in 2½-in. bands, 22¢ each.  
Will ship about Aug. 10. Only 2,000 left.  
Now booking 1947 spring and fall deliveries.

**CALVIN S. GROBAKER**  
115 Beechwood Ave. Cantonville 28, Md.

#### 2500 MAGNOLIA GRANDIFLORA

4 to 5, 5 to 6 and 6 to 7 ft.  
Balled and burlapped.  
Prices on request.

**GRINELS NURSERY**  
Gloucester, Va.

#### CHINESE ELM

5000 straight, well rooted trees, 1½-in. to 3-in. caliper.  
No help to dig; sell in nursery row.  
Each, 50¢ to 75¢.

**R. G. MINICH NURSERIES**  
Overland Park, Kan.  
(A suburb of Kansas City, Mo.)

## OLD ENGLISH BOXWOOD

(*Buxus Suffruticosa*)

### The Aristocrat of Shrubs

★  
The largest and finest  
collection of Boxwood in the  
United States

### WHOLESALE ONLY Specimen Plants

These plants are uniform, globe-shaped, slow-grown in heavy clay soil; the foliage is very dense and the balls are solid, insuring safe transplanting.

All plants are at least twenty years old and are exceptionally hardy, having been exposed in the field to the heat of summer, as well as the winter winds, and when planted where they receive partial shade and protection, develop and grow very quickly.

Do not make the mistake of purchasing quick-grown, forced plants by height alone, as spread and density of foliage are the attractive features of Boxwood and constitute its value.

18 ins. x 14 ins. to  
24 ins. x 20 ins.

Also Large Specimens

★  
Write for Price List

### BOXWOOD GARDENS

(Mrs. R. P. Royer)  
High Point, North Carolina

swers to questions about the contest, write promptly to Mr. Hunziker at the address above.

### AT BOSTON SHOW.

The Cherry Hill Nurseries, West Newbury, Mass., captured the majority of the prizes in the peony classes at the June show of the Massachusetts Horticultural Society, at Boston, and received a gold medal for the general effect of the combined peony exhibits against a background of conifers.

Will C. Curtis, Garden-in-the-Woods, South Sudbury, Mass., received special prizes for exhibits of perennials and woody plants. A bronze medal for a strawberry exhibit went to G. H. Rounds, Abington Strawberry Nursery, Abington, Mass.

### SOIL CONSERVATION DISTRICTS.

Soil conservation districts are local units of government, operating under state laws. They are set up and run by farmers to protect farm and ranch land from erosion, conserve rainfall and improve productivity. They have the authority to ask and receive help from state and federal governments.

The first of these districts—Brown Creek soil conservation district, in Anson county, North Carolina, was organized August 4, 1937.

All forty-eight states now have district laws or other legislation authorizing farmers to carry on their soil conservation programs. By May 15 of this year 1,576 soil conservation districts had been organized. They covered parts or all of more than 1,850 counties and included 860 million acres and 3,881,000 farms, nearly two-thirds of all the farms.

In these self-governed districts, farmers are cooperating to protect their lands. The work of each farmer on his own farm fits into a district-wide plan. They often work in groups, helping each other to apply good land use and conservation methods to their lands. Teamwork is the key to the success of soil conservation districts.

The Soil Conservation Service and other federal and state units furnish technical, educational and other aids to the districts.

WILLIAM WESTHAUSER, Sawyer, Mich., has had his wife in a hospital at Michigan City for the past two months on account of a heart condition and complications.

## PONTIAC NURSERY COMPANY

Romeo, Michigan

Offers a limited surplus of

Peach Trees,

Small Fruit Plants,

H. T. and Climbing Roses,  
Flowering Shrubs in assortment.

Write for Prices  
and list of varieties available

•  
We are in the market  
for fall 1946 and spring 1947  
for several carloads of

EVERGREENS  
ORNAMENTAL SHRUBS  
SHADE TREES

And Many Other Items

Send your surplus lists for  
immediate consideration.

## THE PONTIAC NURSERY COMPANY

Romeo, Michigan

## FIKE NURSERIES

Hopkinsville, Ky.

### EVERGREENS

BIOTAS: Aurea nana, compacta, pyramidalis, chinensis and bakeri.

JUNIPERUS communis depressa, horizontalis, fastigata, excelsa stricta, burki, canariensis, Hill's Dundee, virginiana glauca, keteleeri, pfitzeriana, pfitzeriana compacta, meyeri Andorra and others. Austrian, Scotch and White Pine. Norway Spruce and Hemlock.

Truckloads or Carloads.  
Young, thrifty stock for sales yards  
or landscaping.

## NORTHERN INDIANA EVERGREEN CO.

Hammond, Ind.

Buyers of Evergreens, Trees and  
Shrubs by the carload.

Send us your price list.



## EVERGREENS

Growers of Quality Evergreens  
Lining-out Stock a Specialty  
Write for Trade List

EVERGREEN NURSERY CO.  
Established 1884 • STURGEON BAY, WIS.

## GRAPEVINES, CURRANTS, GOOSEBERRIES and BERRY PLANTS

Can also supply Currant  
linecuts and cuttings.

Known to the Wholesale Trade  
for Small Fruit Plants of Superior  
Quality Since 1890.

F. E. SCHIFFERLI & SON NURSERIES  
Fredonia, N. Y.

## WE HAVE

Shade Trees, Rhododendrons cut back  
and matured in all sizes, Old English  
and American Boxwood in all sizes.  
White-flowering Dogwood in all sizes.

### WANTED

Budding, tractor, digging, spraying,  
pruning machines, trailer and pick-up  
trucks.

## VIRGINIA TREE FARM

Carroll County Woodlawn, Va.

## AZALEAS

Linens Wanted—Hardy Types

J. L. NALEN

8 Grosbeak Road Yonkers, N. Y.



# Fruitfulness in Taxus

By Fred J. Nisbet

The common failure of taxus plants to set fruit has long been a source of annoyance to nurserymen and to gardeners alike. It is especially annoying when a customer complains that his plants, which were well set with fruit when purchased, have failed to fruit again.

The presence of fruit helped sell the plants, and the customer expects, and has a right to expect, that fruit will be borne regularly.

It is up to you, as a skilled plantsman, to produce taxus which will bear plenty of fruit, not only in the nursery, but in your customer's garden as well.

Many explanations for this fruiting failure have been advanced, but few,

to settle. First, how is it possible to determine the sex of plants when no fruit is present?

The staminate, or male, should cause little trouble. The illustration shows the relatively large size and the shape of the bloom. It is generally composed of six to ten anthers set in a globose head at the top of an erect column. This extends out of the cup-shaped cluster of scales, when the flower is fully opened. The color is a light buff-yellow.

Measurements of a few of these flowers have shown that the length ranges from four to eight millimeters and the diameter of the head from two to four millimeters.

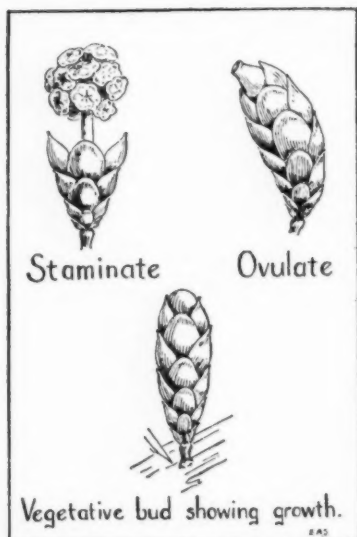
The ovulate, or female, flower is the source of most of the confusion; first, because it is small, and secondly, because it has a superficial resemblance to the vegetative bud.

The drawing shows both of these structures, so that they may be compared. The flower, when ready for fertilization, shows a tip, or micro-pyle, extending beyond the bud scales. From the standpoint of identification, this is the most important feature. The tip is hollow, dull, nearly amber-green and translucent. A hand lens or small reading glass will aid in seeing this structure clearly.

It will be noted, occasionally, that there are twin flowers present. Each has an ovary surmounted by a micro-pyle, but with a single set of scales surrounding both. As these may be seen readily without a glass, their presence makes identification of the sex of the plant easier.

Measurements of a few ovulate flowers have shown lengths ranging from two to three and one-half millimeters. The diameter was, in all cases, approximately one millimeter. The position of these flowers will vary somewhat, but most of them will be found on the under side of the branchlets, within three or four inches of the tips.

The appearance of the vegetative bud differs from that of the ovulate flower in that the scales reach to the tip of the bud, even when growth has begun. The underlying parts, unlike the solid tissue of the micro-pyle, are thin and leaflike, and are laid over one another, much like shingles on a roof. The botanist calls this condition imbricated. Then, too, these potential leaves show a definite green color unlike the dull,



Types of Taxus Buds.

if any, have gone to the source of the problem.

Most plants of the genus taxus are dioecious. Ernest Wilson, in "Conifers and Taxads of Japan," wrote that *Taxus canadensis* bears both male and female flowers on the same plant; that is to say, it is monoecious. A detailed examination of many herbarium specimens and of several hundred individuals in the field has shown that relatively few plants of this species vary from the dioecious pattern of the genus.

At this point, there are two points

For suggesting the problem and for helpful criticism the author acknowledges thanks to Dr. A. M. S. Pridham, also of Cornell University.

## IDEAL NURSERY & ORCHARD COMPANY

"Headquarters"  
For as good as the Best  
SMITHVILLE, TENNESSEE.  
R. F. D. No. 1

★  
**APPLE PEAR PEACH  
PLUMS, DAMSON  
APRICOT GRAPEVINES**

### We offer—

1-year apple and June-budded peach in most all leading varieties. Some 2-year apple and heavy peach available. Also flowering shrubs.

No order too large or too small.

"Quality is our Slogan"

### We welcome—

You to our nursery. If you can't visit us, write, or if in a hurry, phone—Local 2-50.

Office and Storage on Highway 56, only 3 miles south of Smithville, Tennessee

★  
Represented by  
W. R. UNDERWOOD  
1908 — 1946

## WE OFFER...

**APPLE - PEACH  
GRAPE - PRIVET  
SHRUBS**

Write for Quotations

**NEOSHO NURSERIES CO.**  
Neosho, Mo.

## THANK YOU For Your Past Patronage

We expect to have our usual large supply of stock. Would appreciate quoting on your Small Fruit Plant Wants.

**L. J. RAMBO'S WHOLESALE NURSERIES**  
Bridgman, Michigan.

## EVERGREEN TREES

**100,000 Blue, White and Norway Spruce —**  
2 to 6 ft. Now ready.  
Cash and Carry.

**75,000 Blue and White Spruce, 4 and 7-year liners.** Priced right.

**I. C. PATTON**  
Shepherd, Mich.

## WE OFFER FOR FALL 1946

Abella Grandiflora, 1 and 2-yr.  
Azaleas, mixed colors, 2 and 3-yr.  
Cornus Florida, grafting grade.  
Juniperus Virginiana, grafting grade.  
Hemlock, Kalmia and Rhododendron.  
Flowering Shrubs, Tree Seedlings, Vines and Fruit Trees in lining-out stock or finished plants.

Write for prices.

**HIGHWAY GARDENS**  
Rt. 3 McMinnville, Tenn.

## WASHINGTON ASPARAGUS ROOTS

1-yr. and 2-yr.  
Raspberries, Red and Black  
Grape Cuttings

The above in quantity lots.

**THE PAW PAW NURSERIES**  
Paw Paw, Mich.

**Grapevines, Currant Roots, Currant Cuttings and Berry Plants.**

Small Fruit Specialists.

**WEST HILL NURSERIES**  
Fredonia, N. Y. Since 1875

## RHUBARB

Chipman's Canada Red  
25,000 No. 1. divisions

**BASS NURSERY**  
Chadron, Neb.

cloudy, amber-green of the micro-pyle. With these structures separated, determination of the sex of the plant should not be difficult.

The number of flowers borne by different plants varies widely. Only the heavy-flowering plants should be considered as the source of cuttings.

Now we come to the second problem. How is it possible to identify staminate plants in the autumn?

The simplest method is to tag the plants when they are in bloom. This would require little time and lead to positive identification. If this is not done, a careful search of the plant will often show a few of the withered staminate flowers still adhering to the branches, although this is a tedious process at best. In the autumn all plants might be checked and all those showing neither a tag, signifying the staminate condition, nor fruit, should be marked as infertile and disposed of.

With these facts in mind it should not be difficult for the propagator to select cutting material from heavily flowering plants, both male and female. Then, if both sexes are included in each planting, heavy fruiting will result. That is what the gardener desires, and the nurseryman who will satisfy that want should prosper.

## NEW PLANT PATENTS.

The following plant patents were issued during June, according to Rummler, Rummler & Davis, Chicago patent lawyers:

No. 694. Rose plant. Roy L. Byrum, Richmond, Ind., assignor to Joseph H. Hill Co., Richmond, Ind. A new and distinct variety of rose plant, characterized as to novelty by the color of the blooms, stiffness of the neck bearing said blooms, pointed form of buds, lesser quantity of thorns as compared with the variety, Vanity Fair, which it most nearly resembles, and scalloped edges of the petals.

No. 695. Rose plant. Robert G. Jelly, Richmond, Ind., assignor to the E. G. Hill Co., Richmond, Ind. A new and distinct variety of rose plant of the hybrid tea class, particularly useful as a forcing variety, characterized as to novelty by its vigorous free-growing habit in the greenhouse, producing a high degree of perfect flowers borne on medium-length stems; foliage resistant to mildew and black spot infection, and the coloring and strong spicy fragrance of its flowers.

No. 696. Rose plant. Josephine D. Brownell, Little Compton, R. I. The variety of hardy Rosa wichurana hybrid plant, characterized by the features of its parent variety, Break o' Day, with the additional features of climbing habit and intermittent rebloom until frost.

AFTER two years overseas with the Eighty-second airborne division, I. A. Eakins has acquired half ownership of the Carl A. Tillman Nursery, Newburgh, Ind., which will now be known as the Tillman-Eakins Nursery. Forty acres additional were recently purchased for expansion, and the nursery will enter the wholesale field, in addition to the retail trade that Mr. Tillman has built up in the past fourteen years.

**We have to offer —**

**250,000 Hardy Mum Divisions**

**1,000,000 Gladiolus Bulbs**

**100,000 Washington Asparagus, 2-yr.**

ALSO

A GENERAL LINE OF  
SHADE TREES  
AND  
ORNAMENTAL SHRUBS  
FOR THE  
WHOLESALE TRADE

Let us quote you  
on your want list

**NAGLES NURSERY**  
R. 2, Benton Harbor, Mich.

## WE OFFER For 1946-47

Forest evergreens, flowering shrubs and vines.

A general line of seedlings will be on our price list. Trade list will be ready by August 1.

**Johnnie McCarver & Sons**  
Box 487 McMinnville, Tenn.

## PRIVET and BERBERIS

Splendid Stock

Write for Special Quotations

**LESTER C. LOVETT**  
MILFORD DELAWARE

**LINING-OUT EVERGREENS and AZALEAS**

Sturdy Plants.

**DUNLAP NURSERIES**  
Knoxville 16, Tenn.

## EVERGREENS

Lining-out stock  
For fall 1946 and spring 1947.  
Write for list.

**SUNCREST EVERGREEN NURSERIES**  
Johnstown, Pa.

# Oregon Meeting at State College

By Julia Hausch, Secretary

The evening before the 2-day field session at Corvallis, the advisory board members of the Oregon Association of Nurserymen met with members of the experiment station staff of Oregon State College, members of the state inspection service and Frank McKennon, division chief of the department of agriculture. Many business matters were discussed, among which were the licensing of pansy and primrose growers, the recent meeting of the Western Plant Board on the stone-fruit virus problem and the possibility of the college's giving a 10-week short course for nurserymen.

Prof. Henry Hartman, speaking for the college, said that it thought a 10-week short course would be a fine thing, but that as far as the teaching staff was concerned, the college was understaffed. At the end of World War I it had a teaching staff of 6.57 men by full-time equivalent, whereas now it has only 1.96. Now, too, there are many GI's at Corvallis, and they cannot be provided for because of an inadequate teaching staff. A course of this kind would require a man who would give his full time to it, and there is no money in the budget to hire one at this time. It seems that if the nurserymen want a 10-week short course at this time, they must raise the money themselves with which to hire an instructor. Professor Hartman also warned that there were not housing facilities available at Corvallis.

For the first time since the war, Oregon nurserymen had the opportunity to study at first hand the latest developments in the field of horticulture at the Oregon agricultural experiment station grounds, at Corvallis, June 18 and 19.

More than 125 nurserymen were on hand for the 2-day field session, which began with President A. L. Strand, of Oregon State College, welcoming the nurserymen back to the campus after the wartime interruption of this former custom of checking the experiment station findings each summer.

On the campus grounds, a weed control demonstration was given by Virgil Freed, assistant agronomist of the farm crops department, who explained both the possibilities and limitations of the 2,4-D hormone weed killer and showed plots where broad-leaved weeds, such as false dandelion and plantain, had been

killed out of the lawn without harm to the grass.

F. P. McWhorter, plant pathologist, displayed a bed of lilies containing the four leading lily varieties used for greenhouse forcing in the United States, and named these as Creole lily and Croft lily, with Estate and Ace lilies tied for third place. In speaking of German irises and peonies, he pointed out that good sanitation is the best control for keeping these free from disease. Mr. McWhorter also showed samples of bean virus 2 of gladioli, and stressed that this is the source of one of the worst bean diseases in the northwest. A planting of gladioli infected with the bean virus 2 can ruin a snap bean crop planted near by. Hundreds of acres of snap beans are grown for the canneries in the Willamette valley, and so precaution must be taken that there are no gladioli planted near by.

The nurserymen then gathered at the Benton hotel for luncheon. Sam Rich, chairman of the insect pest and disease fund, presented Dr. R. S. Besse, assistant director of the experiment station, with a check for \$2,000 as initial payment on the fund the nurserymen of Oregon are raising to augment funds appropriated by the state legislature for the experiment station's research work on specific nursery problems.

The afternoon session was held at

the east farm. F. E. Price, agricultural engineer, discussed irrigation problems and gave a practical demonstration of irrigation equipment at work. He advised sprinkler irrigation for Oregon, for while furrow irrigation will produce a fine crop in some areas, only sprinkling will do a good job here. A sample of some new 4-inch aluminum pipe created much interest, as this is much lighter and easier to handle than the heavy galvanized pipe commonly used.

The nurserymen then visited the stone-fruit virus block, to which Dr. S. M. Zeller and Dr. J. A. Milbrath, plant pathologists, have devoted a good deal of time. They explained the latest findings in virus diseases of stone fruits and showed how they indexed trees. If a cherry tree appears to be clean, they bud it on another variety of cherry, then on peach and finally on Shirofugen flowering cherry, and if the bud grows, they feel sure it is from a healthy tree. Shirofugen is used as a guinea pig and as a final test to see if a tree is healthy.

Dr. Milbrath urged the nurserymen to register with the experiment station all cherry and peach trees from which they expect to cut budwood this summer, if they have not already done so, as the experiment station staff will cover the territory in July and check every tree registered with it. This is a free service, and

## Genuine California Redwood LOCTITE TRELLISES

Both beautiful and strong. Main shaft and cross members are **LOCKED TOGETHER . . . and STAY TOGETHER!** Every home garden needs one or more. Made in sizes to fit all requirements . . . from small flower pots to climbing roses and big outside growers.

size	style no.	quantity per bble.	approx. weight per bble. lbs. *	span inches	width of base inches	number of prongs	number of cross members	price per dozen
18 ins.	FA	12	1	11	3/4	3	2	\$ 1.49
24 ins.	FB	12	2	15	1 1/16	4	2	2.88
36 ins.	FC	12	5	22 3/4	1 1/32	5	2	4.16
48 ins.	FD	12	7	30 3/4	1 1/4	6	3	5.83
60 ins.	FE	6	10	42 1/4	1 1/8	6	3	8.39
72 ins.	FF	6	14	45 3/4	2 9/16	7	4	10.79
84 ins.	FG	6	16	47 3/4	2 9/16	7	4	12.94
96 ins.	FH	6	21	55	3 3/16	8	4	16.02

\*Subject to 60 per cent increase when green wood must be used

Terms: F.O.B. factory, 2 per cent 10 days. Orders less than 3 dozen, plus 5 per cent. These prices subject to change without notice. Order at once. JOBBERS: WRITE FOR FULL INFORMATION COVERING REPRESENTATION IN YOUR TERRITORY.

Manufactured by

**TIMBERLAND PRODUCTS, INC.**

31 Stevenson St.

San Francisco 5, Calif.



## WE OFFER FOR 1946-47 SEASON

**RED RASPBERRY**, No. 1 Suckers and Transplants. Specializing in Indian Summer, Taylor and Chief. We can at last offer the **Indian Summer Everbearer** in quantities to warrant your featuring them to your trade.

**BLACK AND PURPLE RASPBERRY**, best varieties in No. 1 tips.

**GRAPEVINES**, all common varieties in 2-yr. No. 1 and 1-yr. No. 1.

**BLACKBERRIES, CURRANTS** and other small fruit plants.

We will be represented at the A.A.N. convention at Miami.

**H. E. CONGDON NURSERY**  
North Collins, N. Y.

## EVERGREENS

Spreading Taxus in variety.

Upright Juniper, 3 to 5 ft.

Mugho Pines, 12 to 30 ins.

Write for Prices.

## BROWN DEER NURSERIES

Operated by  
**HOLTON & HUNKEL CO.**

P. O. Box 1747  
Milwaukee 1, Wis.

## WRITE US ABOUT—

- Evergreen Liners
- Shade Trees
- Specimen Evergreens
- Flowering Shrubs
- General Assortment of Stock.

**SHERMAN NURSERY CO.**  
Charles City, Iowa



Wholesale growers of the best  
Ornamental Evergreens,  
Deciduous Trees,  
Shrubs and Roses.

Write for our current trade list.

**THE KALLAY BROTHERS CO.**  
Painesville, Ohio

## HEMLOCKS

KALMIA, RHODODENDRON, AZALEA

**CURTIS NURSERIES**  
CALLICOON NEW YORK

**BURTON'S**  
HEADQUARTERS FOR  
EVERGREEN GRAFTS, TRANSPLANTED  
EVERGREENS, SHRUB LINERS.  
RARE ITEMS YOU DO NOT  
FIND IN MOST LISTS! *Write!*  
**HILLTOP NURSERIES**  
CASHTOWN, OHIO

the purpose is to locate and inspect the best trees possible for use by Oregon nurserymen.

A mother block establishment from which the nurseryman can get his budwood was also urged. Dr. Milbrath suggested planting Mazzard, and when scaffold branches are secured, they may be budded for the mother block.

From the east farm, the nurserymen went by caravan to the Peavy arboretum, just north of Corvallis. Vern McDaniel, in charge of the Oregon forest nurseries there, gave an interesting talk on the native trees grown from seeds for windbreaks, wood lots, shelterbelts and reforestation. Among the varieties grown were ponderosa pine, Port Orford cedar, Douglas fir, cascara, black locust and others. About 300,000 to 400,000 trees were distributed last year to farmers, in addition to nearly 800,000 trees planted in the Tillamook burn area for reforestation.

At the forester's log cabin on the arboretum grounds, the nurserymen spent an enjoyable evening, with music by the five girl accordionists, liquid refreshments by the nurserymen and a picnic supper prepared by Chef Rosenstiel and other members of the experiment station staff.

The second day the nurserymen went by caravan to the Milhollen farm of the horticulture department, where Prof. Henry Hartman was in charge of the program. The following subjects were covered:

**Holly:** Experiments with pollination of holly were discussed. It was shown that there was a heavier set of berries on trees which had been fertilized. There are male and female trees of holly, and while one may have a beautiful tree, if there is no male tree in the vicinity, there is no set of berries for cut holly. Some work done with setting holly fruit with spray has met with some success, but it would be easier to set a few male trees in a planting.

**Southern Oregon Plum** (P. subcordata): This is a variety which grows wild in southern Oregon and northern California, and the fruit is in great demand for preserves and specialty gift boxes. The college has made selections from the wild thickets and now has nine selections from the original lot that show promise. The trees in the experiment plot are budded on peach root and show a wide variety in the type of growth. The tree which the staff feels will be most suitable for commercial plantings will be selected for further propagation.

**New Varieties of Peaches:** There are fifty-two varieties of peach trees

## CUMBERLAND VALLEY NURSERIES, Inc.

McMinnville, Tennessee

## Wholesale Growers of Quality Fruit Stock

Send for quotations on

1-year and June-budded Peach,  
multiple variety Fruit Trees, 1-  
year Pear, Plum, Apricot, 1  
and 2-year Apple Trees, and  
Nectarines.

Also General Nursery Stock.

We specialize in  
June-budded Peach and  
Yearling Apple.

## BLUEBERRY PLANTS

are our specialty  
1, 2 and 3-yr.-old

Special prices in  
Wholesale Lots for  
Fall Delivery

Write for prices to the

**AIRLINE BLUEBERRY FARM**  
606 Butterfield Drive  
EAST LANSING, MICH.

## ORNAMENTALS

**TREES SHRUBS  
EVERGREENS**

Wholesale growers of a  
general assortment for  
the best Landscape Plantings

**BRYANT'S NURSERIES**  
PRINCETON ILLINOIS

**PRINCETON NURSERIES**  
of PRINCETON, N. J.

**SUPERIOR  
Hardy Ornamentals**

**MYROBALAN SEED**

—from our own orchard. Order now for August delivery.

**LOVELL PEACH PITS**

—processed under our supervision. Pool cars east in late September.

**VISIT US When in California**

Our Niles property is rich in California history, contains the celebrated "OLD ADOBE", early hacienda. 300 Living Acres. The latchstring is always out.

—George C. Roeding, Jr.

Growers of **FRUIT TREES, GRAPEVINES, ROSES, ORNAMENTALS**

  
**California**  
NURSERY COMPANY  
Niles, California

**PEACH PITS**

Lovell 1 to 10 bu. \$3.50 per bu.; 10 to 50 bu. \$3.00 per bu.; 50 bu. or more \$2.50 per bu.

Native Carolina-Virginia pits, approximately 6000 per bushel. 1 to 10 bu. \$10.00 per bu., 10 bu. up \$9.00 per bu.

**WAYNESBORO NURSERIES**

Waynesboro, Va.

**Send for Our Seed List.****A. B. C.**

**"Supreme" Quality SEEDS — PLANTS — BULBS**  
and  
Growers' Accessories

**AMERICAN BULB CO.**

1335 W. Randolph St. CHICAGO 7  
31 W. 27th St. NEW YORK 1

**SEEDS**

Collectors of Tree, Shrub and Wild Flower Seeds

Crude Drugs and Ornamentals

**E. C. MORAN** Stanford, Mont.

growing in the experimental plantings at the Milhollen farm, and budwood is available in limited quantities to Oregon nurserymen. Improved Elberta is producing good crops and is earlier than the regular Elberta. Hale Haven is a good bearer and a fine-quality peach, but the fruit is inclined to be a little small.

**Grape Varieties:** There are sixty newer varieties in the experimental plantings. A wine industry is developing in Oregon, and the tendency is toward European grapes, viniferous grapes ripening early. Seneca, which is self-fruitful, seems to be fine for all parts of Oregon. Golden Muscat is just a little late, but it does well if planted in a warm spot. Perle de Casaba is an early-maturing viniferous grape which is promising. The staff recommends the long-arm system of pruning grapes, with four canes per plant, strung along the heavy wire. This method of pruning, which is done in January or early February, has proved more fruitful than the old system of cutting the plants back to stubs, and it keeps the fruit off the ground and keeps it from mildewing on the ground. The yield is sixty to seventy per cent greater by the long-arm method of pruning than by stub pruning.

**Demonstration of Seaman Tiller:** Used in alfalfa sod and twice over, the machine powdered the ground in fine shape for planting.

**Results from Pruning and Fertilizing Orchards:** Fertilizing alone did not show any increase in yields, although the trees showed heavy, dark green foliage and better general appearance. However, the yield was increased by pruning and fertilization.

**Effect of Boron on Walnuts:** Positive results are had in walnuts by adding boron to the ground. Some applications showed some leaf burn, but did not damage the crop.

**Dwarf Apple Root:** Malling apple rootstocks are layered, and segments cut off for lining out. This variety will not come true from seed.

**Sawdust as Mulch Material:** A 3-inch mulch of sawdust around plants saves cultivation and requires no spading. However, fertilizer is needed, especially nitrogen fertilizers for best results. It was recommended that trees in heavy soil be mulched.

**Miscellaneous Experiment Plots:** Flowering crab apple, fig varieties, blueberries and new varieties of cane fruits were viewed by groups of nurserymen interested in those items, but the large experimental patch of thirty varieties of strawberries, well laden with ripe berries, drew the attention of at least half the crowd, which was eager to sample the ripe berries and

**1946 CROP  
LOVELL PEACH PITS**

For Early Fall Delivery

Write for Quotations

F. O. B. Dansville, N. Y.

**KELLY BROS. NURSERIES, INC.**

Dansville, N. Y.

**CALIFORNIA  
LOVELL PEACH SEEDS**

1946 CROP

**APRICOT SEEDS**

Write for prices.

By ton or car.

**GRAY NURSERIES**

P. O. Box 77

Elverta, Col.

**MICHIGAN PEAT****Nature's Finest Soil Builder**

Used by leading growers for 30 years. Rich in nitrogen and plant food. Economical. COSTS LESS TO USE! Packed in 100-lb. bags, averaging 4 bu. Prices F.O.B. Capac, Mich. Each

1 to 19 bags.....	\$1.65
20 to 99 bags.....	1.50
100 to 400 bags.....	1.40

Bulk cars, \$14.00 per ton.

**American Soil Sponge Selling Corp.**  
267 Fifth Ave. New York 16, N. Y.  
Plant Capac, Mich. Capac 62.

**PEACH PITS**

THE  
Howard-  
Hickory  
Company  
Hickory, N. C.

**LAWN PROBLEMS  
SOLVED****No Obligation**

Experience and tested results from our strategically located Proving Grounds.

F. H. WOODRUFF & Sons, Inc., Milford, Conn. • Toledo, O.

**FROSTPROOF APPLE**

The apple tree of the future has been originated. If interested in raising this apple tree, write to

**MAX NURSERY**

Mineral,

Virginia

## SELECT STRAIN STRAWBERRY PLANTS

Our plants are looking fine, and we will have nice stock to ship for October until December, 1946. For Spring, 1947, delivery, book your order now at these prices. We guarantee safe arrival and satisfaction.

EARLY VARIETIES			
	100 Plants	250 Plants	1000 Plants
Blakemore	1.25	2.25	8.50
Bellmar	1.50	2.75	10.00
Dorsett	1.50	2.75	10.00
Fairfax	1.50	2.75	10.00
Maytime	1.40	2.65	9.80
Missionary	1.25	2.25	8.20
Premier	1.50	2.75	10.00
Temple	1.50	2.75	10.00
MIDSEASON VARIETY			
Aberdeen	1.50	2.75	10.00
Big Joe	1.60	2.85	10.50
Catskill	1.60	2.85	10.50
Sen. Dunlap	1.40	2.50	9.00
Dr. Burrill	1.40	2.50	9.00
Starbright	1.50	2.75	10.00
LATE VARIETIES			
Aroma	1.45	2.70	9.90
Chesapeake	1.75	3.35	12.00
Gandy	1.50	2.75	10.00
Red Star	1.60	2.85	10.50
Town King	1.75	3.35	12.00
Lupton	1.50	2.75	10.00
FALL BEARING			
Gemzeta	3.90	8.50	30.00
Gem	2.65	5.40	18.50
Mastodon	2.65	5.40	18.50
Streamliner	5.00	11.40	42.00

Book your order early—we will hold plants for you . . . subject to your shipping instructions. No charge made for packing and packages. Packing-out service available direct to your customers under your tags.

30 Years' Experience Growing Berry Plants  
We Feel Confident That We Can Please You!

## E. W. TOWNSEND & SON NURSERIES

Strawberry Plant Specialists  
Salisbury, Maryland

## FRUIT TREES AND SMALL FRUITS

### HARRISON BROTHERS NURSERIES

G. Hale Harrison, General Manager  
BERLIN, MARYLAND

## SMALL FRUIT PLANTS

Boysenberries, regular and thornless; Youngberries, Raspberries, Strawberryberries, Gooseberries, Grapes, etc.

Write for wholesale price list.  
One million Boysenberry plants annually.

V. P. BASHAM  
Mountainburg, Ark.

Wholesale growers of  
**SMALL FRUIT PLANTS**  
Grapes, Currants and Raspberries—  
our specialty.  
Hydrangea P. G.

FOSTER NURSERY CO., INC.  
60 Orchard St. Fredonia, N. Y.

did a good job of cleaning up one end of the large patch.

At the closing luncheon, Wayne McGill acted as toastmaster and, speaking for the nurserymen, expressed thanks to the college experiment station staff, which had planned the interesting program and done so much toward making this first post-war meeting a success. President Max Horand announced the fall meeting would be September 16 to 18. Dick White will be at Portland for the meeting.

After the luncheon, some left for home, but there was an informal meeting on the campus. Those interested went on a tour of the campus, led by Professor Peck, who showed and discussed plant materials, and then visited some of the Corvallis homes to study landscape plantings. Others enjoyed a visit to the rose gardens of Dr. Milbrath and Professor Hartman, where many new varieties of roses were to be seen.

### CENTRAL CALIFORNIA ASSOCIATION MEETING.

The June meeting of the Central California Nurserymen's Association was held June 13 at the Green Hills Country Club, Millbrae. At this time of the year there is usually a falling off in attendance at these meetings, since many of the nurserymen are away on vacations or their employees are away, requiring full-time attention at the nursery on the part of the owner. However, interest was so great that an overflow attendance was chalked up.

Three items of concern to the nurserymen were announced for discussion. Some were on hand for a 2 p. m. meeting to discuss prices of nursery stock for the coming year. Usually at these meetings the nurserymen can get a line on the probable supplies and demand for the coming months and can decide if prices should be changed or kept about the same. This year there was much variety in the feelings expressed. To some nurserymen the "honeymoon" is over and these men feel that regardless of supplies, prices must come down and service must be increased. Others are of the opinion that this area is in for many years of continued boom and that costs of production and service will continue to rise, so that to stay in business it will be necessary to raise prices even above current levels. The middle-of-the-road group seems to feel costs have about reached their peak, that demand too is about as high as it will go and that current prices are about right. No one pres-

## CUTLER & DOWNING CO.

BENTON HARBOR, MICH.

★

### Wholesale Small Fruits

Reds	Blacks
Latham	Cumberland
St. Regis	New Logan
Taylor	Sodus

### Dewberries

### Blackberries

Eldorado	Blowers	Alfred
	Mersereau	

### Boysenberries

Thorny	Thornless
--------	-----------

We suggest early orders.

★

## CUTLER & DOWNING CO.

## C. M. Hobbs & Sons, Inc.

BRIDGEPORT INDIANA

Established 1875

### FRUIT TREES

### GINKGO

### NORWAY MAPLE

### SOFT MAPLE

### SWEET GUM

### THURLOW WILLOW

### WELL GROWN EVER- GREENS, in variety.

## To The Wholesale Trade

We have the following items to offer:

Apple, 1 and 2-year-old  
June-budded Peach  
Lining-out Peach  
Pear, 1 and 2-year-old  
Plums, Apricots and Damson

We welcome inquiries, and let us furnish your needs.

## FRAZIER NURSERY CO.

Box 1 Smithville, Tenn.



ent expressed himself as even suspecting that there is any immediate prospect of lower costs or demands and there was no indication of any possible reduction in either the retail or the wholesale costs of nursery stock in this area. No real decision was reached, but in general it may be said that there is not much prospect for any kind of change in costs or prices in the next six months to a year.

The San Mateo Fiesta was given a large share of the time at the meeting. This is a popular flower show in the bay area, particularly in the peninsula region. In the past it has drawn large crowds, who have come to see the results of the current year's work of the professional nurserymen and florists, the specimen stock produced by the gardeners of the many large estates in the area and the results of the efforts of a large number of amateur flower and vegetable growers. This year, in order to share in state fair funds for prize money, classes also have been opened to livestock raisers, boys' and girls' farm groups and others. The meetings, as usual, will be held at the Bay Meadows race track, the clubhouse being used for the more extensive exhibits and tents for the rest of the displays. Plans are being made to air condition the tents. Racing will be conducted during the fair. The profits from the racing, aided by some special state funds, will be used to buy a site and build a million-dollar building in which to house this and similar fairs in the coming years.

Jack Lincke, executive secretary of the state nurserymen's association, told of the growth of the association in the past year. He has asked each member to see two or more non-members and to bring them into the group to raise the membership to about 650.

Mr. Lincke also spent considerable time in discussing labor relationships. He is of the opinion that the nursery trade is grossly underpaying its employees and he feels there must be a general raise in the average salaries and a standardization of wages paid in a given area for the same or similar work. He feels, too, that employees should be better assured of an income when away from work because of illness or off-the-job accidents. He said that if the nurserymen did not take the initiative in this, someone would step in and see that it was done.

Secretary Jule Christensen announced that three new membership applications had been favorably acted on since the preceding meeting. Jack McDonnell said that plans for the

Member  
American Association of Nurserymen

Member  
California Association of Nurserymen

## DEL RANCHO FORTUNA

T. A. SAND, Owner  
Post Office Box 548  
McFARLAND, CALIFORNIA

FRUIT TREES  
GRAPEVINES  
SHADE TREES  
CITRUS TREES  
PERSIMMONS  
WALNUTS

Located one mile south and two miles east of McFarland, Kern County, California. 560 acres of virgin soil devoted exclusively to the WHOLESALE growing of NURSERY STOCK for the retail NURSERYMAN.



5% Discount  
If Check Comes  
with Order.

**CARSCALLEN NURSERY LABEL**  
COMPANY

### ALUMINUM LABELS

We have just produced a new plant label made of aluminum. It is sturdy, bright, and will not tarnish. Dress up your plants with good looking labels—Your name and address printed in 3 lines—1000 \$6.00, 5000 \$27.50, 10,000 \$55.00—

F.O.B. Pasadena—30 days delivery.

### Carscallen Nursery Label Company

65 West Union, Pasadena, California

state convention at Berkeley, September 23 to 25, were being completed and an advance copy of the program would soon be ready. The plans are for a large meeting, spent equally between fun and business, with the fun provided by a group of Hollywood movie stars who will be in town on other business and who have tentatively agreed to entertain the nurserymen one or more evenings. Meetings of the California Association of Nurserymen are known for the good time everyone has, and with the chairman working as hard as he is for this meeting, one can expect a lot at Berkeley in September.

The annual picnic of the Central California Nurserymen's Association was held at Flood park, near Palo Alto, July 11. The group got together about 2 p. m. for a ball

game and other amusements and later at a basket supper. Each member brought his own food, and the association furnished the coffee and soft drinks. There will be no August meeting.

W. B. B.

C. J. GROEN ROSE CO., Montebello, Cal., has completed the installation of 60,000 square feet of glass at the nurseries which will be entirely devoted to roses.

WHEN the Southern California Horticultural Institute held its monthly meeting June 3, at the Elks' Club, Los Angeles, Jack Evans, of Evans & Reeves, West Los Angeles, was the principal speaker. His topic was fuchsias and other hardwood shade plants. Alfred W. Roberts exhibited exotic conservatory ferns and gave a short talk on the various ones shown.

## CALIFORNIA NOTES.

Mrs. Mayne Ouzts, known to every gardener in the San Francisco area, was honored with a buffet supper by Mr. and Mrs. F. C. McNabb for twenty-five years of service at the Hallawell Seed Co. Mrs. Ouzts will now retire from the seed and nursery business and devote her time to gardening. She has over three acres of specimen bulbs, flowering shrubs, fruit trees, roses and vines. Her home is known as a show place and visited annually by hundreds of amateur and professional gardeners.

Fruit harvests in the state are so handicapped by lack of labor and shooks for box making that it is reported that several hundred acres which were to be planted to new orchards next fall are being abandoned. The nurserymen propagating trees for these areas may have left a lot of good trees. The demand by homeowners and small orchardists will, however, take up most of the apparent overproduction.

Farm wages in California in 1945, without board, averaged \$173 per month compared with a national average of \$89 per month. Few laborers, even transients, will now take a job unless living quarters are furnished.

Nurserymen shipping stock in refrigerator cars will benefit from recent improvements in car design which will reduce vibration, insure better ventilation, use less ice and get the stock to destination in better shape with less packaging.

A tomato which is strongly resistant to curly top, nematodes, verticillium wilt and spotted wilt and which produces a large crop of high-quality fruit is being grown by a limited number of growers this year. The variety is a production of the University of California.

Peach blight (shot-hole fungus) is causing an unusually large amount of damage in Stanislaus county this year, according to an agricultural extension report. A good type of copper spray is recommended for the control of this disease.

The Stonehurst Nurseries, Oakland, operated by Harry Korematzu and his brother, are doubling the area in production.

The Pennington Nurseries, operated by Ralph A. Colgate, at San Carlos, now also operate a flower store. The flower store is in a separate building several blocks from the nursery salesyards.

Eric Walther, of Golden Gate park, claims that San Francisco nurserymen are failing to capitalize on the

# CALAPOOIA

## BERRY FARM & NURSERY

Shedd, Oregon

Wholesale

Growers of **Berry Plants** and **Small Fruits**.

We are one of the largest Raspberry growers in the Pacific northwest.

We will have a large supply of both 1 and 2-year-old plants.

*Write for Catalog.*

## SOME ITEMS WE OFFER FOR 1946-1947

Fruit Trees in Variety

Seedlings—Apple, Pear, Shade Trees

Dwarf Fruit Trees	Chestnuts	Espalier Trees
Filberts	Grapes	Walnuts
	Shade and Flowering Trees	Small Fruits
Shrubs—Deciduous and Broad-leaved		
Conifers	Vines	

Catalog ready in September.

Retail catalogs in color available to the trade at cost.

40-page general catalog, 30c.

32-page bulb and rose catalog, 25c.

**RICH & SONS NURSERY**

Route 4

Hillaboro, Ore.

### NOTICE

Limited production makes it impossible to book orders for new customers.

**HOWARD ROSE COMPANY**  
Hemet, California

many different kinds of plants which can be grown in this area. He says only about 5,000 of the 50,000 possible kinds of plants are being offered for sale by commercial nurserymen.

Nurserymen planning to attend the state convention at Berkeley, September 23 to 25, are warned that they must make hotel reservations early, as the amount of space is limited. The Claremont hotel is headquarters.

James Wilson, of the Peters & Wilson Nurseries, Millbrae, is spending a month in the northwest on a combined buying trip and vacation.

Paul Doty visited the trade in Cali-

### FOR THE BEST IN TREE LABELS

Copper Wired

### POT LABELS

### GARDEN LABELS

Write

### WOOD SPECIALTIES COMPANY

2515 S. E. 25th Street,  
Portland 2, Ore.

fornia last month. He reports that the Oregon production of nursery stock will be bigger than ever, but far below the demand.

John Edwards has outgrown the camellia-propagating houses he built a few years ago and is now renting space at a wholesale pot plant range for starting his plants. He recently

## ON THE WEST COAST, IT'S CAMERON & CO.

*The Far West's Outstanding  
House in the Heart of Ameri-  
ca's Great Bulb Industry.*

Wholesale Headquarters for  
Florists, Nurserymen, Cut  
Flower Growers and Retail  
Dealers.

**COMPLETE STOCK of  
BULBS,** Domestic and  
Imported

**SEEDS,** Flower, Vegetable  
and Grass

**NURSERY STOCK and  
PLANTS**

**GARDEN SUPPLIES**

Write for our latest lists.  
Your inquiries solicited.

## CAMERON & CO.

Offices: 2133 Western Ave.  
Main 0683 Seattle 1, Wash.

If it's **APPLE** or **PEAR**  
**SEEDLINGS** or **Chinese**  
**Elm Seedlings** you want,  
write us.

Dependable growers  
of quality stock.

**WASHINGTON NURSERIES**  
Toppenish, Wash.

## SHINGLE TOW

(Baled Cedar Shavings)

Immediate shipment  
carload lots.

**MONARCH SHINGLE CO.**

P. O. Box 37  
North Portland, Ore.

## BALED SHINGLE TOW (CEDAR SHAVINGS)

**WM. A. JOHNSTON**

408 Postal Bldg., Portland 4, Ore.

returned from a two weeks' fishing trip.

Gregory Bros.' Nursery, Brentwood, is now offering a new lemon known as Golden Beauty. It is reported superior to most kinds used in home gardens in the state, but it is not yet being offered to commercial orchardists.

The Pacific Nurseries, Colma, have undergone a complete face lifting in the past few weeks. Much stock has been destroyed, new plants are being bought in and a plentiful use of hoe, rake and paint has greatly improved the appearance of the sales area.

The Nu-Lawn Chemical Co. is a newcomer in the San Francisco area. Operated by two recently discharged naval officers, R. I. Throctmorton and Frank Lewis, both graduates of the University of California, the company plans a lawn and garden-developing business. While it will do no planting, the firm will take over after that work has been done and care for the plantings, with emphasis on spraying and fertilizing. W. B. B.

### RAISE FREIGHT RATES.

The Interstate Commerce Commission June 21 restored, with modifications, the emergency freight rate increases which it had authorized in 1942, but suspended two years later.

The commission's decision—which will result in an estimated increase of \$390,000,000 in gross annual revenues for the nation's railroads—was its temporary answer to the railroads' petition for an emergency increase to meet rising wage and other costs.

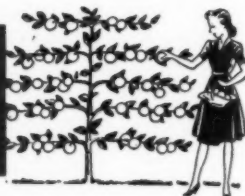
The increase authorized was an average of six and one-half per cent for the country as a whole. But it left the way open for additional rate increases after extended hearings have been conducted on the railroads' request for a general twenty-five per cent rise.

Under the order, common carriers by water and freight forwarders are authorized to make the same increases in their rates and charges as those allowed the railroads.

In restoring the wartime emergency freight rate increases the commission allowed the eastern district lines, which form the predominant part of the so-called official classification territory, a larger amount than that granted to other lines.

The increases authorized are in general six per cent upon all commodities, except certain basic commodities such as products of agriculture, livestock and products and low-grade products of mines, such as sand, gravel, broken rock and slag. As to these, the increase approved is

*Espalier  
FRUIT  
TREES  
grow  
like vines*



**60 Varieties**

**APPLES, PLUMS,  
PEARS, CHERRIES,  
PEACHES, APRICOTS  
AND**

**U. S. ESPALIER  
DWARF FRUIT TREES**

*Write for price list.*

**U. S. ESPALIER NURSERY CO.**

4445 S. W. Hamilton St.  
PORTLAND 1, ORE.

## RARE BULBS and PLANTS

**Agapanthus**, dwarf  
**Alstroemeria**, in variety. (Including beautiful blue *A. violacea*)  
**Bletilla**, hardy white and lavender  
**Orchid**  
**Calla maculata alba**  
**Chlidanthus**  
**Habenanthus robustus**  
**Haemanthus Katherine**, small supply  
**Ixia Bloem Erf**  
**Leucocoryne** (Glory-of-the-Sun)  
**Moraea**, in variety  
**Nerine**, in variety  
**Schizostylis**, red and pink varieties  
**Watsonia Dazzler**

### VELTHEIMIA VIRIDIFOLIA

Big heady of rose-red, tubular flowers on 2-foot stem. Bold habit and beautiful bright green, shiny leaves with wavy edges. Especially good as pot plant for Christmas and Easter trade. \$30.00 per 100.

All the above, native to South Africa, South America or Asia, are grown by us and do well in this climate. Many are also hardy.

Delivery fall and winter.

**WHOLESALE ONLY**

Ask for dealer's descriptive catalog and price list.

**LAS POSITAS NURSERY**

P. O. Box 750  
Santa Barbara, Cal.

*See us at  
the Miami convention.*

**F. A. DOERFLER & SONS**

150 N. Lancaster Dr., Salem, Ore.



three per cent of the going rates. A further increase of five per cent of the approved rates is authorized in official classification territory, except on anthracite, bituminous coal and lignite, and upon iron ore. For these latter commodities the increases approved are generally applicable over the whole country.

The Interstate Commerce Commission announced subsequently that hearings will open at Chicago July 22 on the railroads' petition for a twenty-five per cent general freight rate increase. Hearings are to be held in other sections of the country as soon as possible after the Chicago hearings end and not later than August 12, the commission announced.

#### ASK EXPRESS RATE RAISE.

Railway Express Agency, Inc., June 24, asked Interstate Commerce Commission authority to increase its rates and charges to obtain what it called "urgently needed additional revenue." It asked the ICC to determine what increases are justified.

As interim relief it asked authority on thirty days' notice to increase all less than carload rates by 15 to 30 cents per 100 pounds and revise graduated charges on shipments under 100 pounds to the basis of pound rates plus 50 cents with certain exceptions.

The agency said increased revenue is needed to meet higher wages of its employees, larger pay roll taxes and increases in other expenses.

ROBERT PYLE, president of the Conard-Pyle Co., West Grove, Pa., flew to France from La Guardia field, N. Y., June 3, representing the American Rose Society and accepting an invitation of the city of Paris to be a judge at the Bagatelle Concours of Roses, June 5.

CREEPING bent stolons develop more satisfactorily when planted if they are pulled apart rather than chopped. Chopping shocks the grass, and the finer it is chopped the worse the shock. A rotary tiller may be used to pull stolons from a bent nursery. The grass which is left will grow and fill again.

FRANK B. BONNELL, of the Bonnell Nursery, Earlington, Wash., left last month for a six weeks' trip to Europe, where he expects to find and buy many rare plants for his nursery. While on the Continent he will visit France, Belgium and Holland, and in England will see Dr. John Hanley, former director of the University of Washington Arboretum.

## PORTLAND WHOLESALE NURSERY CO.

306 S. E. 12th AVENUE Avery H. Steinmetz PORTLAND, OREGON

### Quality Stock

CONIFERS AND BROAD-LEAVED  
EVERGREENS  
SHADE AND FLOWERING TREES  
FRUIT TREE SEEDLINGS  
FRUIT TREES  
DECIDUOUS SHRUBS  
VINES AND BULBS  
PORTLAND ROSES

To the American Association of Nurserymen  
we extend best wishes  
for the greatest Convention in 71 years.

Write for our Catalog

### A. MCGILL & SON

FAIRVIEW, OREGON

Wholesale Only

#### GOOD WESTERN-GROWN NURSERY STOCK

Fruit Tree Seedlings  
Flowering Ornamental Trees  
Shade Trees

Grown right and packed right.  
Combination carloads to Eastern  
distributing points will save you  
on freight.

### MILTON NURSERY CO.

A. Miller & Sons, Incorporators  
MILTON-Since 1878-OREGON

#### OUR SPECIALTIES

Growers of  
General Line of  
Nursery Stock.

Oregon and Oregon-Grown  
Apple and Pear Seedlings,  
Angers Quince Rooted  
Cuttings.

Combination Carloads to Eastern distributing points at minimum freight cost.



### SHERWOOD NURSERY CO.

EVERGREENS - Propagators & Growers  
141 S. E. 65th Ave., PORTLAND 16, ORE.

### DOTY & DOERNER, Inc.

6691 S. W. Capitol Highway  
Portland 21, Oregon

Wholesale Growers  
of  
General Nursery Stocks

### PACIFIC COAST NURSERY

Specializing in fruit tree seedlings since 1914. We also have Norway and Schwedler Maple, Chinese Elm, European White Birch, Cut-leaf Weeping Birch, Paul's Scarlet Hawthorn and Kwanzan Flowering Cherry. All 2-yr.-old stock.

John Holmason, Prop.  
2244 N. Skidmore Ct.  
Portland 11, Oregon

### AS ALWAYS— OREGON'S BEST SOURCE of GOOD ROSES

Limited crops reserved for  
established customers.

### PETERSON & DERING

Wholesale Rose Growers  
Scappoose, Oregon

## CLASSIFIED ADS

Five lines, \$1.00,  
each additional line 20 cents,  
per insertion.

### BERRY PLANTS

#### BLUEBERRY PLANTS

Orders being taken for fall 1946 delivery, 6 to 12 ins., well rooted. Cabot, Rancocas, Jersey, Rubel, Concord. \$25.00 per 100, \$225.00 per 1000. Quotations on other sizes on request.

JOSEPH G. O'NEILL  
P. O. Box 32 Moorestown, N. J.

Hardy, strong No. 1 2-yr. Eldorado Blackberry and Lucretia Dewberry plants, prolific bearers of luscious fruit, \$4.00 per 100, \$25.00 per 1000. Careful packing, prompt service. MRS. CHARLIE ROBINSON, Greenville, Ga.

### BULBS

#### DAY LILIES

Hemerocallis Kwanoo Florepleno. The only double Day Lily known. Prize winner Royal Horticulture Society. Large, double, rich golden-bronze flowers in July and August. \$15.00 per 100.

#### IRIS KAEMPFERII

The modern orchid of the gardens. The greatest gift of the Orient to the American gardeners. Field-grown plants from divisions of choice varieties in mixed colors. Order now for early fall planting. \$15.00 per 100. Cash with order, please.

#### BROOKFIELD GARDENS

Rt. 6, Delaware, N. J.

CANNAS—Select stock, 200,000 President, rich scarlet, 4 ft., green foliage, carefully grown under our personal supervision, guaranteed true to name. Strong, 2 to 5-eye divisions, liberally graded, \$3.00 per 100, \$60.00 per 1000.

MRS. CHARLIE ROBINSON, Greenville, Ga.

DAFFODILS, large hardy, well balanced mixture of Golden Spur, Orange Phoenix, Von Sion, Tenby Obvallaria, White Lady, Jonquil Orange Queen, Georgia-grown. \$25.00 per 1000, F.O.B. MRS. RUTH GABLE, Haralson, Ga.

### EVERGREENS

EVERGREEN LINERS, many varieties; Roots of all kinds; Seeds; Shade Tree Whips; Flowering Shrubs, lining-out size; Calif. Privet; Mums; Berry Plants; Azaleas and Rhodod; Blueberries, for the trade within commuting distance. We have the most up-to-date and largest supply of large plants of all kinds, ready dug and burlapped, ready to go; no waiting or holding you up when you get here. Prices are right.

WM. E. WENTZEL EVERGREEN NURSERIES  
Sewell, N. J. Phone: Wenonah 4-1

#### 200,000 BUXUS SUFRUTICOSA

Most beautiful, true, old-fashioned, dwarf, heavy, rounded, compact, perfect shaped tops, carefully grown under our personal supervision; 8 years; 10 to 12-in. plants, \$50.00 per 100; 35c in lots of 1000 or more.

MRS. CHARLIE ROBINSON, Greenville, Ga.

#### HARDY LINERS

Canada Hemlock, 6 to 9 ins., 2 tr... \$20.00  
Canada Hemlock, 9 to 12 ins., 2 tr... 25.00  
Zanthorhiza apiifolia, rooted layers... 5.00

#### CHAS. H. WILLIAMS NURSERIES

Box 223, Exeter, N. H.

#### AZALEA MOLLIS

Clean, fresh seed, harvested winter of 1945-46.

Trade pkt. 50c; ¼ oz., \$1.25; oz., \$2.25.  
WESTERN HORTICULTURAL SUPPLY CO.  
3629 S. E. 67th Ave. Portland 6, Ore.

TAXUS Capitata, upright; T. brevifolia, R. C., \$12.50 per 100, T. cuspidata, spreading; Retinospora Plumosa Aurea, R. C., \$11.00 per 100; \$100.00 per 1000. Good stock ready for shipment July 10.

DEERFIELD NURSERIES, Deerfield St., N. J.

500 BOXWOOD SEMPERVIRENS, 2 to 3 ft. Can remain for several years. Come and dig them.

#### CONESTOGA GARDENS

Lancaster, Pa.

#### BUXUS SUFRUTICOSA

10,000 heavy bushy bed plants, 6 to 8 ins., \$10.00 per 100; \$75.00 per 1000.

MRS. CHARLIE ROBINSON, Greenville, Ga.

#### NATIVE AZALEAS

Snow and Pink—Heavy, good spread, 2 to 3 ft., \$10.00 per 100, \$75.00 per 1000.

MRS. CHARLIE ROBINSON, Greenville, Ga.

If you don't find what you want  
try a Classified Ad  
under the heading "Wanted."  
It's cheaper than mailing out a want list.

### GRASS SODS

We again solicit, after four years' absence, your GRASS SODDING contracts. No job too large or too small for us to handle.

#### ABBOTT'S GARDEN SERVICE

Box 205, Flushing, N. Y.

### GROUND COVERS

AJUGA GENEVENSIIS, excellent evergreen ground cover. Hardy. Blossom resembles small delphinium 6 ins. high. Mass of blue in May. Lining-out stock. Nice 1-yr. plants, \$3.00 per 100; \$25.00 per 1000.

#### LONGMEADOW NURSERIES

15 Parkside, Longmeadow, Mass.

### HARDY PLANTS

Lily of the Valley pipe.....\$1.25 \$10.00  
German Iris, 10 colors.....1.00 9.00

Hemerocallis, Dr. Regel, Flavia.....\$5.00

Kwanoo.....3.00

Fulva.....3.00

Funkia lanceolata.....5.00

GOOD DIVISIONS.....Per 100

Variegated Ivy, ground cover.....\$1.00

Bugle Ivy, ground cover.....4.00

White Siberian Iris.....3.00

Phlox subulata rosea.....1.00

Sedum coccineum.....1.00

Sedum acre.....1.00

C. HUNTS NURSERY, Rt. 2, Mishawaka, Ind.

### PRIMULA POLYANTHUS—WESTERN

#### GIANT STRAIN

Clean, new crop seeds of this wonderful strain of giant, hardy primroses. Heavy, erect trusses of blooms and fine range of brilliant colors commend this strain to the most discriminating growers. Plants of this strain brought \$2.50 per dozen wholesale on the Portland market this spring. Many retailed up to 50c per clump. Seeds, generous trial packet, \$1.00 postpaid. Full ¼ oz., \$2.00. Now booking orders for seedling plants, September delivery, \$2.00 per 100. Minimum order 250.

WESTERN HORTICULTURAL SUPPLY CO.

3629 S. E. 67th Ave. Portland 6, Ore.

### VIOLETS

Sweet-scented blue, hardy, heavy bloomers; large plants, \$3.00 per 100, \$25.00 per 1000.

MRS. CHARLIE ROBINSON, Greenville, Ga.

#### PERENNIAL VERBENAS

Rich scarlet. Nice, well rooted plants, \$4.00 per 100; 200 for \$7.00.

MRS. CHARLIE ROBINSON, Greenville, Ga.

### SEEDS

Booking orders for following seeds freshly collected from tree to you. Per lb.

Cornus Florida.....\$0.50

Magnolia Glauca.....1.50

Ilex Opaca......50

Ilex Verticillata......50

Ilex Glabra......80

Aronia Arbutifolia......50

Aronia Melanocarpa......50

WM. J. WRIGHT, R. D. 1, Bridgeton, N. J.

PEACH PITS, southern collected, high germination, \$3.00 per bu. Peach, Plum, Apricot, fall delivery: 1-ft., 20c; 2-ft., 30c; 3-ft., 40c; 4-ft., 50c; 5-ft., 70c; 6-ft., 80c.

Cash with order.

RIVERDALE NURSERIES, Riverdale, Ga.

RHUBARB SEEDS, Victory. Strawberry and Mammoth mixed, 55c per lb. Divisions, No. 1 at 6c. Cash with order.

SWEDBERG NURSERY

Battle Lake, Minn.

California Lovell Peach Pits and Apricot Pits, 1946 crop, cured, sacked and shipped early in September. Write for prices.

GRAY NURSERIES

Elverta, Cal.

### SHRUBS and TREES

HOLLAND-GROWN Azaleas, Rhododendrons, Junipers, Taxus, Thuja, Lilacs, Magnolias, Peonies, Pyrethrums, Dicentras, Liliums and a good list of useful nursery items, subject to the Netherlands' government regulated prices. JOHN VAN DER POL, Boskoop, Holland, represented by VAN'S NURSERY, M. Van Der Pol, owner, Fairhaven, Mass.

AMERICA'S MOST LOVELY ORNAMENTAL TREES—Liquidambar styraciflua (Sweet Gum), Red Maple, Red Cedar, Red Oak, Black Gum, American Elm, Magnolia Glauca, Crab Apple, Pine and Snow Fringed (Graybeard), No. 1, 2-year, \$15.00 per 100; No. 1, 3-year, \$20.00 per 100. Quantities for sale. MRS. CHARLIE ROBINSON, Greenville, Ga.

DOGWOOD (Cornus Florida)—Large white, mammoth-flowered, good spread; 2 to 3 ft., \$10.00 per 100; 3 to 4 ft., \$15.00 per 100; 4 to 5 ft., \$25.00 per 100; 5 to 6 ft., \$30.00 per 100. Attractive price on 1000 lots or more. MRS. CHARLIE ROBINSON, Greenville, Ga.

SWEET SHRUB (Calycanthus Floridus), a large-leaved shrub with spicy, fragrant chocolate-colored flowers; 2 to 3 ft., \$15.00 per 100; 3 to 4 ft., \$20.00 per 100. Quality stock. MRS. CHARLIE ROBINSON, Greenville, Ga.

### VINES

#### HALL'S HONEYSUCKLE

(Lonicera Halliana Japonica)

Strong No. 1, 2-year, field-grown, 3 to 4 leads, 18 to 20 ins.; carefully graded, selected plants, \$4.00 per 100, \$30.00 per 1000; lighter plants, \$20.00 per 1000. Immediate shipment. MRS. CHARLIE ROBINSON, Greenville, Ga.

### MISCELLANEOUS

Wholesale prices for 1-year, No. 1 GRAPES  
Per 100 Per 1000 Per 10,000  
Concord.....\$10.00 \$20.00 \$200.00  
Fredonia.....11.00 100.00 900.00  
Moore's Early.....11.00 100.00 900.00  
Campbell's Early.....11.00 100.00 900.00  
Delaware.....12.00 110.00 1,000.00  
Niagara.....11.00 100.00 900.00

CALIFORNIA PEACH SEEDS  
California Lovell Peach Pits from 1946 crop. Well cared for in drying. In bags of about 80 lbs. Each \$3.00 per bushel. In lots of ten and up, \$2.50 per bushel, F.O.B. Rogers, Ark.

WHOLESALE PRICES OF CANNA BULBS.  
\$5.00 per 100, \$50.00 per 1000

Hungaria, tall, pink; Wyoming, yellow; King Humbert, red; Yellow King Humbert, yellow; President, red; Pennsylvania, orange and red.

BENTON COUNTY NURSERY CO., INC.  
Rogers, Ark.

### DECORATIVES

AMERICA'S FINEST NATURAL CONES—We are in the midst of South's best, perfect, uniform size, selected Pine Cones, Sweet Gum balls, Cotton and Chinaberry pods, \$2.00 per bu.; \$1.00 per bu. in lots of 500 bus. or more. Immediate shipment; satisfaction guaranteed. MRS. CHARLIE ROBINSON, Greenville, Ga.

Surplus Stock  
can be easily and quickly turned into  
Cash  
listing it in the  
American Nurseryman Classified Ads.

### SUPPLIES

#### CANE STAKES

#### FOR POT PLANT GROWERS

Now is the time to get the best DOMESTIC CANE STAKES. All dark green. Check this list now against your order.

#### HYACINTH STAKES, THIN.

Per 1000  
12 ins.....\$5.50  
15 ins.....6.25  
18 ins.....7.15

#### STANDARD PENCIL THICKNESS

1 ft.....5.50  
1½ ft.....7.15  
2 ft.....8.95  
2½ ft.....11.75  
3 ft.....12.15  
3½ ft.....14.30  
4 ft.....16.95

(Can also furnish 5 and 6 ft.

Write for prices.)

#### MEDIUM HEAVY.

¾ to 1½ in. (500 to bale.)

2 ft.....10.50  
2½ ft.....13.50  
3 ft.....15.00  
3½ ft.....16.50  
4 ft.....19.50  
5 ft.....23.70  
6 ft.....35.00

#### HEAVY TONKIN.

½-inch and up.

Per 100  
3½ ft.....\$3.00  
4 ft.....3.50  
5 ft.....4.80  
6 ft.....5.30  
7 ft.....5.95  
8 ft.....6.60

AMERICAN FLORIST SUPPLY CO.  
1335 W. Randolph St. Chicago 7, Ill.

#### STAKES—Bamboo

Carefully Selected—Dyed Dark Green.

Uniform Pencil Thickness.

No. G-31 2 ft. Bale of 2000.....\$10.95  
No. G-32 2½ ft. Bale of 2000.....13.90  
No. G-33 3 ft. Bale of 2000.....16.65  
No. G-34 3½ ft. Bale of 2000.....19.45  
No. G-35 4 ft. Bale of 2000.....22.35

#### TONKIN STAKES—Bamboo

Dyed Green—Medium Heavy.  
No. G-41 3 ft. Bale of 1000.....\$ 9.85  
No. G-42 3½ ft. Bale of 500.....7.75  
No. G-43 4 ft. Bale of 500.....8.70  
No. G-44 5 ft. Bale of 500.....11.95  
No. G-45 6 ft. Bale of 500.....13.75  
No. G-46 7 ft. Bale of 200.....7.70

We cannot break bales.

Quantity discounts, 10 to 24 Bales, 5 per cent.  
25 Bales or more, 7½ per cent.

SCHUPP SUPPLY CO., Wilmette, Ill.

RUBBER. Your Rubber requirements are important. Know where to get it when you want it. Belts, rubber bands, boots, coats, gloves, hose, apron bulbs, aprons, budding strips. Get our price sheet and catalog today. BROADWAY RUBBER MFG. CO.  
Louisville 2, Ky.

COTTONETTE Squares are best for balling. Saves time and twine. All sizes in stock. Write NEW AMSTERDAM IMPORT  
123 Chambers St., New York 7, N. Y.

A. F. S. "EASI-OFF" WOOD PLANT BANDS		
Size in ins.	Weight per 1000	Per 1000
1 1/4 x 1 1/4 x 3/4, 12 lbs.		\$3.35
2 x 1 1/4 x 3/4, 15 lbs.		2.60
2 1/4 x 1 1/4 x 3/4, 20 lbs.		4.20
3 x 1 1/4 x 3/4, 21 lbs.		4.60
3 x 3/4 x 3/4, 22 lbs.		5.30
4 x 1 1/4 x 3/4, 40 lbs.		6.30

Packed 1000 to the carton.

We do not break the cartons.

LIGHT WOOD FLATS.

For handling and shipping our 1 1/4-inch and 2-inch sizes of Plant Bands.

	Per 100
M-376: holds twelve 1 1/4-inch Bands	\$3.75
M-390: holds twelve 3-inch Bands	3.30
M-392: holds twelve 2 1/4-inch Bands	3.75
M-393: holds six 3-inch Bands	3.55
M-394: holds six 4-inch Bands	3.95

Packed 100 to the carton. We do not break cartons. Shipped promptly from the factory in Michigan.

AMERICAN FLORIST SUPPLY CO.

1335 W. Randolph St. Chicago 7, Ill.

#### MEL-LO PEAT

A pure Sedge Peat, weedless, odorless, no inert matter. Analyzed 2 to 2 1/2 per cent nitrogen, 96 per cent humus; acidity 5.3 to 5.8. Used by greenhouses, growers, landscape gardeners and golf courses since 1933. Recommended by the agricultural colleges and universities. Accept no substitutes. Demand a nationally known product, Mel-lo Peat. The best natural humus available today.

1 to 10 2-bu. bags, f.o.b.	\$1.25
11 to 50 2-bu. bags, f.o.b.	1.10
51 to 100 2-bu. bags, f.o.b.	1.00
101 to 200 2-bu. bags, f.o.b.	.90

Every planter needs Mel-lo Peat for potting, coldframes, seed boxes, porch boxes, enriching lawns, trees, shrubs, gardens. Excellent for geraniums, azaleas, and hydrangeas; one part peat, two parts soil is ideal. Very good for carnations, petunias, cyclamen, camellias and gladioli.

MEL-LO PEAT CO., ELYRIA, O.

#### KNOCK-DOWN FLATS.

Made from a good grade of Southern Yellow Pine, since Cypress is not available. Standard specifications, inside measurements.

16x12x2 1/4	\$16.25 per 100
15x14x3 1/4	20.50 per 100
20x14x2 1/4	20.00 per 100
20x14x3 1/4	23.00 per 100
22 1/2 x 15x2 1/4	22.00 per 100
22 1/2 x 15x3 1/4	25.00 per 100

All other sizes quoted on request. Prices F.O.B. Birmingham.

We are manufacturers, not jobbers. Freight to any point is a small item per Flat. Our Flats are the best. Why pay more? Our quality guaranteed. Prompt shipment, any quantity. Attach check to order.

HIGHTOWER BOX & TANK CO.

Birmingham, Ala.

#### IMPORTED CANE STAKES

Check your needs and order now.

Size	Per 1000
15 ins.	\$3.80
18 ins.	4.10
24 ins.	5.40
30 ins.	6.90
36 ins.	8.30
48 ins.	10.75

AMERICAN BULB CO.

1335 W. Randolph St. Chicago 7, Ill.

FINE NO. 1 OR NO. 2 SCREENED PEAT.

Acid. 4-5. Some nitrogen. Our Peat is excellent for Azaleas and Hydrangeas, also for mixing with soil for potting and seed flats. This Peat is very good for Petunias. Packed in 2-bu. bags, 5 to 24 bags, \$1.00 each; 25 to 49 bags, 95c each; 50 to 100 bags, 90c each. We ship same day order is received. Cash, please.

HAASE BROS.

116 S. Jefferson St., Peoria, Ill.

#### PROFIT WITH PERF-O-RAIN.

Rain when you want it—low pressure—rectangular strip watered—No overlap—No sprinkler heads or other gadgets—Portable lightweight pipe—Long life. Write for free folder. W. R. AMES COMPANY OF FLORIDA, 2905 E. Broadway, Tampa 5, Florida, or W. R. AMES COMPANY, 150 Hooper St., San Francisco 7, Calif.

#### SPHAGNUM MOSS

Long-bered, burlap bales, 1946 production, prompt delivery; F.O.B. Floodwood, Minn., \$1.80; F.O.B. Hanlontown, Ia., \$1.95. Fine milled, 50-lb. bags, for control of damping-off, etc.; F.O.B. Floodwood, Minn. \$1.75; F.O.B. Hanlontown, Ia., \$1.90.

COLBY PIONEER PEAT CO.

Hanlontown, Ia.

#### METAL-BOUND FLATS

Sturdy, lightweight flats, made of pine and fir, painted and reinforced with 12 metal corners. Inside measurements 14 1/2 x 30 x 4 1/4 ins., with partition making 2 sections each 14 1/4 ins. square. Special price \$12.50 per 100, \$100.00 per 1000; F.O.B. Athens, Ga. Attach check to order.

EVERGREEN GARDENS.

P. O. Box 351, Athens, Ga.

#### PRINTING

Letterheads, billheads, statements, cards, envelopes, tags, blotters, folders, catalogs, samples. Send copy for estimate. J. GARLAND HILL, Dept. A, Seaford, Del.

MAGIC ELECTRIC WELDER, 110-volt AC-DC; welds, brazes, solders, cuts all metals; easy to use; full directions. Complete with power unit, flame and metallic arc attachments, carbons, fluxes, rods, mask. Only \$19.95. Used by the Navy. Guaranteed one year. Splendid for nursery and farm use. MAGIC WELDER MFG. CO. 241NA Canal St., New York, N. Y.

SOIL HEATING EQUIPMENT, designed by a grower and engineer, for commercial propagation. Cable, soil thermostat and pilot lamp to heat 20 sq. ft., \$11.40; 40 sq. ft., \$14.25; 60 sq. ft., \$17.10; 80 sq. ft., \$19.95, and 150 sq. ft., \$27.05. F.O.B. Seattle. L. N. ROBERSON CO. 1539 E. 103rd St. Seattle 55, Wash.

#### STEEL TUBULAR STAKES

Place orders now to meet your early spring sales, together with your own nursery requirements. 1/4-in. copperized to prevent rusting, 20 per ft.; 1/2-in. plain, 30 per ft. 1/4-in. plain, 40 per ft.; less 10 per cent. Made up in any length. Samples mailed. H. HOHENBERGER, Box 253F, Monroe, N.Y.

WISCONSIN'S QUALITY SPHAGNUM MOSS, tightly compressed in burlap or wire, direct from the drying beds. Trucked when feasible. Prompt shipment. WARRENS MOSS CO. Box 7, Warrens, Wis.

SOIL HEATING CABLE by "GRO-QUICK." Heavy duty cable now available, also thermo. Bottom heat can't be beat for rooting cuttings, for forcing. Get free instal. date. GRO-QUICK, 366 W. Huron St., Chicago 10, Ill.

GIBRALTAR Frost Covers pay for themselves. Economical, long-lasting, ideal for windbreaks, 6 ft. wide; 50 ft., \$13.75; 100 ft., \$26.00; 150 ft., \$39.00. NEW AMSTERDAM IMPORT, 122 Chambers St., New York 7, N.Y.

If you don't find what you want

try a Classified Ad

under the heading "Wanted."

It's cheaper than mailing out a want list.

#### WANTED

WANTED for fall delivery: 500 Peach, 300 Pear, 200 Plum, 200 Apricot, 100 Apple, 50 Cherry, 10 Nectarine, 10 Almond, 10 Quince. Grade, 4 to 6 ft., 1 1/16-inch and up. First-class. Please let us have list of whatever varieties you can supply. If you cannot supply all, we will consider whatever amount you can supply. Quote price now if you so desire or market price later will be O.K. TRAUERNICHT NURSERY CO. 400 N. Sylvania Ave. Fort Worth 5, Tex.

WANTED to buy for Autumn and Winter delivery, all varieties of rooted cuttings, lining-out stock and finished ornamentals. Would appreciate your list or catalog. GRIMSHAW NURSERY

1020 Dublin Blvd. Hayward, Cal.

WANTED—Oriental popples for delivery August 1. Must be large roots. Send sample and price. Also want bulbs and perennials. SHERIDAN ROAD NURSERY 3201 North Sheridan Road Peoria 5, Ill.

#### SEEDS WANTED.

Apple, Pear, Plum, Apricot, Cherry, Damson, Peach.

ARTHUR V. LEY

La Plata, Md.

#### TREES WANTED

Apples, Pears, Plums, Peaches, Cherries, Damsons, Apricots. Five to twenty years old.

ARTHUR V. LEY

La Plata, Md.

## QUINCES FOR WINE.

When the Star Straw Cover Co., Sandusky, O., perfected a method for making quince wine in 1934, the owners of the firm found so few commercial sources of quinces that they had to enter the quince growing business. William H. Hommel solicited nurserymen for the quince trees for the company, but growers had never heard of an order for ten quince trees and it was only by signing contracts for at least 100 trees at a time of each variety that he succeeded in getting the nurserymen to graft high-quality varieties of quinces for the firm. Today Star Straw Cover Co. boasts eight varieties of quinces and last year there were nearly 5,500 trees coming into bearing. About 5,000 bushels of fruit is expected this year. Mr. Hommel said the company found the trees easy to grow, but that quinces needed plenty of spraying in addition to the dormant sprays, one in November and one in January.

## DDT FOR CODLING MOTH.

Judging from two years' experiments with DDT for the control of codling moth on apples in western New York, this new insecticide is by far the most effective material ever tried against this pest, says Prof. S. W. Harman, entomologist at the New York state experiment station at Geneva.

Much yet remains to be learned about the use of DDT, both as a spray and a dust, in the apple orchard, according to Professor Harman, and he advises growers to continue with the standard spray program where it has worked satisfactorily until more is known about DDT. However, in orchards where heavy spraying with lead arsenate has not controlled codling moth, growers would be justified in adopting a DDT program this coming season, he says.

At the rate of one pound of actual DDT in 100 gallons of water, exceptionally clean fruit was obtained in the station tests with three cover sprays for first brood codling moth and one August application for second brood worms. Many other apple insects also appeared to be held in check by these applications.

"Our studies with spray residue indicate that DDT may prove much less of a problem on apples than lead arsenate," says Professor Harman. "Judging from the results of a considerable number of analyses of apples sprayed with DDT, it appears possible to use a schedule of three

## CLOSING DATE.

Full report of the doings of the convention of The American Association of Nurserymen, at Miami, July 15 to 18, will appear in the August 1 issue of the American Nurseryman. Account of this Victory Convention will be read with close interest by those who stay at home. Hence the issue will be of particular advertising value. Last forms for the August 1 issue will close July 23.



first and one second brood cover sprays and at the same time conform with residue regulations. Allowing approximately four weeks between the final spray in August and time of picking should avoid excessive residues, assuming that not more than one pound of actual DDT is used in 100 gallons of spray mixture."

Thus far, the only serious disadvantage observed in the station tests from the use of DDT on apples is an increase of the European red mite as soon as the spraying season is over. This seems to be due to the destruction of the natural enemies of the mite by the DDT spray. This and other possible dangers from the use of DDT on apples are under investigation.

**SIGURD CHRISTENSEN**, formerly of Sheridan, Ont., has purchased property at Oakville, Ont., on which he plans to start a nursery.

**PETER M. KOONTZ**, salesman for Mount Arbor Nurseries, Shenandoah, Ia., was motoring on his honeymoon from Ohio to Shenandoah with his bride when he collapsed from a heart attack just two blocks from the Cook County hospital at Chicago. After resting there for three weeks, he is making good recovery.

**PANA NURSERIES**, Pana, Ill., owned and operated for nearly twenty-five years by D. M. Forsythe, has been sold to Roy Newlin, a nurseryman at Assumption, Ill. Mr. Newlin's sons will operate the business at Pana and will occupy the residence properties there, while Mr. Newlin will continue in business at Assumption.

**AFTER** specializing in fuchsias for the past eight years, the Vander Velden Wholesale Fuchsia Nursery, Corona, Cal., last month turned to the general nursery field and now owns and operates the Vander Velden Nursery. Now located at 1214 Victoria drive, after August 1 the address will be 119 Ford street.

#### HELP WANTED

Foreman who can handle men. Steady employment. State experience and salary expected, also send references.

**C. L. VANDEREROOK & SON**  
P. O. Box 126, Sta. A Manchester, Conn.

#### WANTED

To employ on Veterans' Training Plan, a young man who has had some landscape training and sales experience.

**WAYNESBORO NURSERIES**  
Waynesboro, Va.

**FOR SALE**—Entire nursery business, wholesale and retail, complete with about 25 acres of stock; total about 100 acres. One house, tools, tractors, barns, greenhouse, etc.  
**PETER J. BOOY NURSERIES**,  
Mendham, N. J.  
Phone: Mendham 3-0248

## WANT ADS

Help and Situation Wanted and For Sale advertisements.

Display: \$2.50 per inch, each insertion. Liners: 20¢ line; minimum order \$1.00

### NURSERY FOR SALE

One of the old pioneer nurseries of the west, with a well established trade since 1890.

Well located on main highway close to a large city; large spacious office building, packing sheds, display yards; an excellent tract of land, fully equipped with irrigation system; large quantity of stock ready for the market. Full Details, address Box 451, care of American Nurseryman.

### FOR SALE

47-acre nursery and landscape business, with large retail trade, established 30 years. Tools including large tree mover and two trucks. Price \$20,000.00. Only nursery near city of 60,000 population, with a number of other good towns and cities near by. Practically new shrub storage 60x25 ft. Attractive office and 7-acre sales ground. Nursery located inside city of Jamestown, N. Y., on Chautauqua Lake, on route 17, main route between New York City and Chicago. 40 acres, all tillable, partly planted, located just outside of city. Owner wishes to retire on account of age and poor health. Inquire

**ATWATER LANDSCAPE CO.**  
168 Fluvanna Ave., Jamestown, N. Y.

### FOR SALE

Nursery and landscape business established twenty-five years; location, Georgia. 38 acres land, 20 in ornamentals, perennials; 2 houses; plenty of water; good propagating beds; on paved highway. More landscape work than we can do. Owner wishes to retire on account of age. Fine opportunity for a nurseryman and landscape man. Address box 449, care of American Nurseryman.

### FOR SALE

An old established nursery located in a county-seat town in the heart of a rich agricultural district of the middle west. Modern buildings and equipment, including irrigation wells, etc. A number of large cities located within a radius of 125 miles. At a price you can afford to pay.

Address Box 448, care of American Nurseryman.

### WANTED

Returning ex-serviceman would like to buy a small nursery in the New England area.

Address Box No. 450, care of American Nurseryman.

### FOR SALE

The largest nursery in central Minnesota; 25 acres evergreens, general stock, including 4,000 Colo. Spruce finished; wholesale and retail business; 320 acres in all, 150-acre field; 85-acre peat bed, worth a fortune alone; good buildings, electricity. Buy direct from owner; no encumbrance. Aged owner retiring, sacrifice for quick sale. \$20,000.00. Address Box 446, care of American Nurseryman.

### SITUATION WANTED

Veteran, 25 years old, married, wants training on GI program in general greenhouse management, propagation and floral design. Six years of nursery experience prior to naval enlistment.

**LEE McKOWN**  
Apt. 12, Victory Heights, Pratt, Kan.

### HELP WANTED

Propagator-salesman. Man capable of operating our propagation department, growing all varieties of landscape nursery stock, and serving customers. Write, giving full details of experience and references for interview.

**WESTCOTT NURSERY CO.**  
Falls Church, Va.

### HELP WANTED

Landscape architect who can call on customers, make planting suggestions, draw plans; only those with college training need apply; permanent, year-around work.

**JAN B. VANDERFLOEG**  
North Muskegon, Mich.

### HELP WANTED

Experienced nurseryman foreman and sales manager.

Must know all kinds of nursery stock. Must know how to grow and propagate same. A fine opportunity with a future for the right man. State all details as to your experience and give references in your first letter.

**EGYPTIAN NURSERY & LANDSCAPE CO.**  
Farina, Ill.

### HELP WANTED

Landscape salesman, also nursery salesman, also nursery propagator. All three men must be thoroughly experienced. Write full particulars.

**MALMO NURSERIES & LANDSCAPE SERVICE**  
Seattle, Wash.

### HELP WANTED

Young man to learn a profitable tree nursery business in east; wages and share of profits with idea of taking over the business.

Address Box 447, care of American Nurseryman.

### HELP WANTED

Experienced supervisory personnel needed for expanded operations by an old line Eastern Wholesale Nursery.

Address Box 442, care of American Nurseryman.

### HELP WANTED

Northwestern nurseryman wants man to learn the nursery business and qualify for foreman and superintendent; no previous experience necessary, but a liking for nursery work essential; man with GI Bill of Rights preferred but not necessary. Wonderful opportunity for right man. Give full particulars in first letter.

Address Box 452, care of American Nurseryman.

**SECRETARY'S REPORT.**

(Continued from page 12)

Congress found itself in a legislative jam, and prospects for passage daily became less and less.

However, it is felt that with the support of agriculture and forestry generally given to the legislation, and with the known support indicated in correspondence in both branches of Congress, sufficient momentum has been developed to make the consideration of this legislation easier and more rapid in the next session of Congress if we fail in this session.

I want particularly to express my appreciation to the members of the national affairs committee, who individually performed so admirably in expressing the views of the industry to members of Congress. To the members of this committee I express my thanks for a job well done, even though through no fault of their own, the visible results of their efforts have been delayed.

I call your attention also to the report and recommendations of the trade practices and ethics committee. As the committee reports in its opening paragraph, "There is nothing that builds confidence to a greater extent with the general consumer than high standards of business ethics which inspire confidence in any individual group."

The nursery industry has not been one to toot its own horn. We should probably do some tooting. But before we toot too much or too loudly, we must have a document which will explain to the public what we as an industry stand for. It is not enough in my estimation to say we stand for high business principles. This would be too much like Calvin Coolidge's famous statement that the minister of his church was against sin.

This committee has attempted to put down what it considers to be sound business principles to which all can agree. The adoption of these recommendations would give us a set of sound business rules of conduct that could well be publicized to the consuming public.

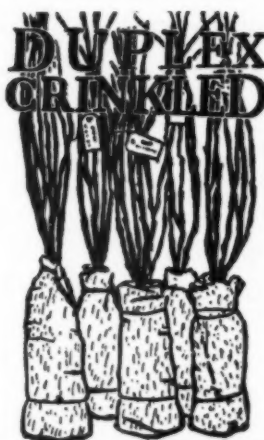
I personally believe it is time to give consideration to another revision of our "Horticultural Standards," to include line drawings illustrating the measurements used and to include or so to modify present standards as to give consideration to standards of plant material used on public projects.

I call your attention also to the progress reported in the market development and publicity committee's report, and the real progress reported

**SOLVE WRAPPING PROBLEMS, USE****CHASE  
DURATEX**

Costs  
Less Than  
Burlap

Does a  
Better Job



Makes  
Clean—Neat  
Bundles

Keeps the  
Moisture In

It will pay you to investigate Chase **DURATEX**. It will prove in your own shipping room its superiority to any other wrapper for retaining dirt and moisture around the roots, and for delivering a clean, attractive package.

**DURATEX** is two sheets of kraft paper cemented with asphalt filler and crinkled to stretch and conform to shape of bundle.

It's waterproof—tough and easy to handle. It comes to you in various sizes to best meet your requirements.

**CHASE BAG CO.**

Boise  
Dallas  
Toledo  
Denver  
Chicago  
Detroit

Memphis  
Buffalo  
St. Louis  
New York  
Cleveland  
Hartington

Milwaukee  
Pittsburgh  
Kansas City  
Minneapolis  
Gothen, Ind.  
Reidsville

Philadelphia  
New Orleans  
Orlando, Fla.  
Salt Lake City  
Oklahoma City  
Portland, Ore.

Chagrin Falls, O.

Hutchinson, Kan.

Winter Haven, Fla.

**DIG  
2 HOLES  
A MINUTE**

—WITH—

**A ROPER**

Planting and transplanting time is cut way down when you use a Roper high-speed hole digger. Installed easily by one man in a few minutes. Safe, fast and efficient in all soil types. Adjustable so that holes may be dug straight down even on rolling land. Priced reasonably direct from manufacturer.



Up to  
18-in. Diam.  
and  
30 ins. Deep

**Buy Direct**

**ONLY \$125.00**

\$126.50 with 18-in. blade.

F.O.B. Factory

(Available to fit Ford Tractors with Ferguson System only until further notice.)

**ORDER NOW!**

**TWO-WEEK DELIVERY!**

**SEND FOR DETAILS!**

**ROPER MANUFACTURING CO., WALNUT DR., ZANESVILLE, OHIO**

## E-Z CREPED WATERPROOF—The New Nursery Wrap

Light weight combined with strength—Pliable and easy forming.  
Will not support mildew, fungus or moths. Mice or vermin will not eat through it.  
In 200-yard rolls 24, 36 and 48 inches wide.

Sheets to your order.

Immediate delivery

Write for samples and prices

### EAGLE WRAPPING PRODUCTS CO.

*Packing Supplies for the Nurseryman*

**312-330 North Carpenter Street**

**Chicago 7, Ill.**

A limited quantity available for immediate shipment in 30/30/30 plain or creped waterproof in 200-yard rolls 18, 24, 36 and 48 inches wide.

by the committee on botanical gardens and arboretums.

As usual, the Washington office has worked in close cooperation with committee chairmen during the year.

Many of the association activities heading up in the Washington office are reported to you in the committee reports as cooperative accomplishments between the headquarters of office and the committees.

The past year has been a rather hectic one from many viewpoints. In order to keep two girls in the office answering your correspondence, we have had seven for varying lengths of time, and during the past two months, when we normally seek additional temporary help, we have had but one. If it were not for the loyalty and long hours Miss Skinner has given to the A. A. N., we could never have accomplished what we have accomplished in getting everything ready for this convention.

We have had a busy but, on the whole, successful year in our association activities. We can look back and measure progress. But we look ahead to the problems that lie before us.

Most important, in my estimation, for the protection of this industry of ours, as well as for the protection of agriculture and forestry generally, are our efforts and those of other agricultural groups to secure passage of corrective legislation to the plant quarantine act of 1912.

At the same time we must continue our efforts to enlarge and strengthen our association, to expand our services to our members in all possible ways, to advance our committee work wherever possible, to cooperate with the state associations on matters of state concern, and to continue to render service promptly to our members at their request, on the wide variety of problems upon which over 1,000 concerns seek information.

If we can ever secure adequate office help, we will carry our end satis-

## A MECHANICAL CAN CUTTER



Patent applied for.

- 1—Saves money.
- 2—Saves time.
- 3—Quick adjustment to fit 1, 3 or 5-gallon cans.
- 4—Cuts 4 holes in sides at bottom rim (not in bottom) in one easy stroke.
- 5—Case-hardened blades for longer wear.
- 6—Replaceable parts.
- 7—Assembled, ready for use.
- 8—Shipping weight 45 pounds.
- 9—AVAILABLE FOR IMMEDIATE DELIVERY.
- 10—Price F.O.B. Nursery, \$38.50. Cash with order please.

### VERHALEN NURSERY COMPANY

1114 South Beckley  
Dallas, Texas

Scottsville, Texas

## HORTICULTURAL PEAT MOSS

Excellent Quality — Good Packages

Wire or write for carload price  
and freight rate.

### THE ATLANTIC SUPPLY CO.

31 S. Calvert Street  
BALTIMORE 2, MD.



factorily. We will need the help of the trade on our legislative problems, and I know that this help will be forthcoming when called for.

You are members of one of the oldest trade associations in existence. You are members of one of the larger associations. You are also members of one of the best known trade associations. These things indirectly lend prestige to you. Let's strive to make the A. A. N. even bigger, better and more favorably known in the coming year. We will do our part in Washington. You will do your part in your everyday business contacts.

#### NEBRASKA ROSE GARDEN.

A new municipal rose garden is to be laid out for the city of Lincoln, Neb., along lines that will please nurserymen. The present park superintendent, Ernest Herminghaus, who has had some experience as a nurseryman, had encountered the overabundance of varieties that exists in nursery stock, and when he took over the Lincoln parks he found a rose garden with 115 varieties. He believes there cannot be that many good varieties and it is misleading to the public to display so large a number and a burden on the local nurserymen, who are asked to supply some odd rose seen in the parks.

It is his opinion that there are no more than about twenty good varieties of hybrid teas, which number is about right for the home garden. If the homeowner can go to the park and see twenty such varieties, he will gain and so will the nurseryman. Twenty such varieties were determined for Lincoln and Nebraska; a garden containing these is being designed.

To arrive at this list of twenty, six different groups of rose fanciers were asked to prepare what they considered the twenty best with an additional list of ten. Those asked were Marshall's Nurseries, Omaha, Neb.; Williams Nurseries, Lincoln; the University of Nebraska department of horticulture, the Lincoln Garden Club and the members of the park department, who had developed the present rose garden. The six presented a total list of seventy-five varieties and were in complete agreement only on four. These were Radiance, Editor MacFarland, Condesa de Sagato and Etoile de Hollande, which constitute the big four. On eight additional varieties, five out of six could agree on Red Radiance, Mrs. Charles Bell, Betty Uprichard, Soeur Therese, Crimson Glory, Grenoble, President Hoover and Kaiserin Auguste Viktoria. Four out of six

## CONCORD HAS FOR YOU...

### THE LINE • FAST PROFITMAKERS •

#### KARMEX 2, 4-D WEED KILLER



25 Tablets per Bottle  
100 Tablets per Bottle  
1 Tablet covers up to  
100 sq. ft.

**KILLS WEEDS WITHOUT  
HARM TO GRASS!**

**HANDY TABLETS**  
No Muzz — No Fuss  
No Teaspoonfuls

#### AMMATE POISON IVY KILLER



2 lb.—12 to Case  
6 lb.— 4 to Case  
50 lb. Fibre Kegs  
350 lb. Barrels

**THIS IS JUST THE BEST  
POISON IVY KILLER EVER  
MADE.**

**Easy to Use**  
—and Safe!

#### GARDEN DUST

##### SENSATIONAL SALES!

Contains 5% DDT plus  
Rotenone to kill bugs.  
Contains Zerlate and  
Fermate to stop Blight.

1 lb.—12 to case  
4 lb.— 6 to case



#### ROSE DUST

##### A NEW FORMULA!

Sulphur and Fermate Combined  
to Make the Best Rose Fungicide  
Ever Developed.

1 Lb. Units—12 to a Case

#### DDT INSECT KILLERS

##### DUST

1 oz. Puffer Cans  
2 oz. Sifter Cans  
8 oz. Sifter Cans

##### SPRAY

Pints  
Quarts



**FUNGICIDE: ZERLATE • FERMATE  
SULFORON • COPPER "A"  
SPREADER—STICKER**  
**INSECTICIDE: LORO • DEENATE DDT**

**DEALERS: WRITE FOR FOLDERS, PRICE  
SCHEDULES AND OUR PROFITMAKER PLAN!**

**CONCORD**  
**CHEMICAL PRODUCTS, INC.**

636 SIXTH AVE.,

NEW YORK 11, N. Y.

could agree on the next four, namely, Charlotte Armstrong, Mrs. E. P. Thom, Christopher Stone and E. G. Hill. On the final four varieties to be chosen, only three out of six could agree. They were Edith Nellie Perkins, Mme. Joseph Perraud, McGredy's Scarlet and Heart's Desire.

In recapitulation, the experts chose this group of roses listed as to color:

Red—Red Radiance, Etoile de Hollande, Crimson Glory, Grenoble, Heart's Desire, Christopher Stone, Charlotte Armstrong, McGredy's Scarlet, E. G. Hill.

Pink—Radiance, Mrs. Charles Bell, Edith Nellie Perkins, Editor MacFarland.

Yellow—Mrs. E. P. Thom, Soeur Therese.

White—Kaiserin Auguste Viktoria.

Two-tone—Betty Uprichard, Condesa de Sastago, President Hoover, Mme. Joseph Perraud.

#### F. D. JONES HONORED.

Franklin D. Jones, chief chemist of the horticultural department of the American Chemical Paint Co., received the degree of doctor of science (honoris causa) at the centennial commencement of Bucknell University, June 29.

Mr. Jones, a member of Phi Gamma Delta fraternity, received his bachelor's degree, magna cum laude, at Bucknell in 1919. Since his graduation, he has devoted his time to the chemical field, specializing in research and development of plant hormones for agricultural use.

His most recent work has been the weed-killing properties of dichlorophenoxyacetic acid, already widely publicized as 2, 4-D. This chemical formula, marketed under the name Weedone, by his company, kills most noxious weeds at low cost. It does not, however, kill grass, and so this product developed by Mr. Jones' experimentation opens up new vistas for agriculture, because weeds can now be controlled in pastures and in cereal crops without harm to grass or crop.

EDWIN STEINMETZ has purchased the Lincoln Highway Nursery of Upper Sandusky, O., from Delberat A. Smith.

THE AMERICAN PLANT FOOD COMPANY of Washington, D. C., recently moved into a new office and warehouse at 6315 Blair road, N. W., reports its proprietor, John Dunn. The company has been in business in Washington since 1923.



## CHEMICAL INJECTORS NOW AVAILABLE

### Immediate Delivery

A High-pressure, Precision-built Injector for Every Purpose.

These injectors are rugged in construction and very accurate in dosages to be injected.

All injectors listed below may be used with any kind of chemicals—for SOIL FUMIGATION—SOLUBLE FERTILIZERS—SOIL DEFICIENCIES—SOIL AND ROOT FUNGI—SOIL PESTS—AND THE ERADICATION OF PERENNIAL NOXIOUS WEEDS.

**No. 45F**—Small-type injector for bench-bed treatment, as in greenhouses, etc. Injects from 2 cc. to 20 cc. per single stroke of the plunger.

**No. 45AF**—Large-type injector for ground-level treatment, for fumigation. Injects from 2 cc. to 30 cc. per single stroke of plunger.

**No. 44AX**—Large-type injector for ground level treatment, for perennial weed eradication and rodent control. Injects from 1/4 ounce to 2 1/4 ounces per single stroke of the plunger.

If there is no dealer near you, mail order direct to factory.

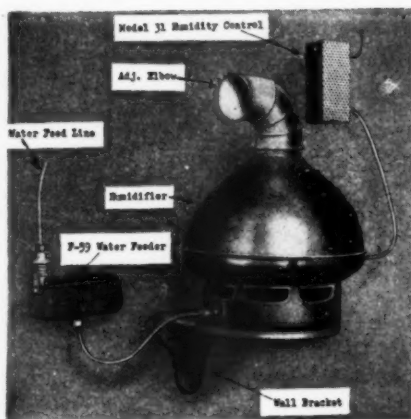
## MACK'S ANTI-WEED GUN

Manufacturers and Distributors

1424 Chicago Street

Caldwell, Idaho

## HUMIDIFICATION



is a definite advance in Propagating Technique.

The Standard Model No. 42 Humidifier shown with automatic control meets the need for a small-size, inexpensive, efficient unit.

This unit can be installed in a few minutes, and will immediately start to make and maintain the climate best suited for product growth.

Write for descriptive literature and price.

## THE STANDARD ENGINEERING WORKS

Pawtucket, R. I.

## Learn Landscape Gardening

A thorough home-study course specializing in the design and layout of grounds plus plant and feature selection and location. Training also includes plant propagation, surveying and grading operations, design of sprinkler systems, pruning, budding and grafting, transplanting operations, soil preparation, design of walks and drives, retaining walls, pools, design for border plantings, color harmony, etc.

### Project Included

A design project covering problems on property of your choosing is incorporated in your course. This project is developed under the guidance of our Landscape Architects who follow it through to completion thus insuring coverage of your regional conditions.

### Employee Training

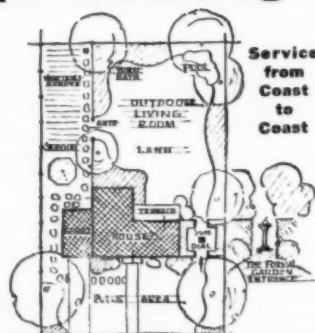
Nurserymen from Maine to California are using this training to upgrade employees. It may be of help to your organization.

### Approved for Veterans

NORMAN A. MORRIS, Landscape Architect

National Landscape Institute

Dept. N-7 726 So. Broadway, Los Angeles 14, Calif.





# SELL YOUR ROSES, PERENNIALS, SHRUBS, VINES AND FRUIT TREES

STARTED &  
GROWING in

**CLOVERSET POTS**

PAT. NO. 2073695

NO LOSS FROM BREAKAGE

WEIGHT ONLY 1/16 WEIGHT OF  
SAME CAPACITY CLAY POT

LOW PRICE POT MAY BE GIVEN  
AWAY WITH PLANT

NON-POROUS—ONLY HALF AS  
MUCH WATERING REQUIRED

EASY FOR PURCHASER TO  
REMOVE FROM PLANT

PRACTICAL IN SHAPE—  
DOUBLES SOIL CAPACITY

WIDE BASE PREVENTS FALLING  
OVER IN DISPLAY GARDEN

STARTED AND POTTED PLANT  
SELDOM LOST



(STANDARD HEAVY)

	No. 0	No. 1	No. 2	No. 3
Height	5½ ins.	6½ ins.	9½ ins.	9 ins.
Diam. Top	5 ins.	6 ins.	7 ins.	8 ins.
Bottom Diam.	4½ ins.	5½ ins.	6½ ins.	7½ ins.
Corresponding Clay Pot	6-in.	7-in.	8-in.	9-in.
Approx. Weight Per 100	35 lbs.	52 lbs.	78 lbs.	88 lbs.
Per 100	\$ 2.50	\$ 4.00	\$ 4.50	\$ 5.00
Per 1000	\$22.50	\$35.00	\$40.00	\$45.00

## NOTICE

AFTER HOLDING OUR PREWAR PRICES ALL  
DURING THE WAR YEARS, GREATLY INCREASED  
PRODUCTION COSTS MAKE NECESSARY THESE  
PRICE CHANGES EFFECTIVE AUGUST 15, 1946.

	No. 0	No. 1	No. 2	No. 3
Per 100	\$ 2.75	\$ 4.00	\$ 4.50	\$ 5.00
Per 1000	\$25.00	\$37.50	\$42.50	\$47.50

No. 0 for perennials and for greenhouse use;  
No. 1 for perennials; No. 2 for roses and shrubs;  
No. 3 for large shrubs and transplanting.

Orders for 300 pots or more  
take 1,000-pot price. Orders  
for less than 300 pots take  
100-pot price.

F.O.B. KANSAS CITY. TERMS: CASH WITH ORDER, EXCEPT ESTABLISHED AC-  
COUNTS. Prices Subject to Change Without Notice. Please send ¼ of amount on C.O.D.  
orders.

Unless otherwise instructed, we will determine method of shipment. If you designate  
express, we advise you to check the cost with your local Express Agent.  
Cloverset Pots take 3rd class freight rate. All Cloverset Pots are packed 100 in carton,  
ready for use. We do not break cartons.  
Write us about carload discounts and freight savings based on carload rates.

## CLOVERSET FLOWER FARM

ERNEST HAYSLE & SON

105TH STREET AND BROADWAY KANSAS CITY 5, MISSOURI



### INSPECT PEACH BREEDING AT FORT VALLEY, GA.

Six nurserymen from Tennessee attended the conference on new peach varieties held at the United States horticultural field laboratory, Fort Valley, Ga., June 12. Three came from Winchester: E. W. Chatin, of the Southern Nursery & Landscape Co.; Arthur J. Shadow, of the Shadow Nursery Co., and Hoskins A. Shadow, of the Tennessee Valley Nursery. The Commercial Nursery Co., Decherd, was represented by Hubert Nicholson. Paul Patterson and his son, Paul, Jr., of Smithville, represented the Farmers Wholesale Nursery. Three members of the horticultural department of the University of Tennessee were also present; they were Dr. L. L. Davis and Professors Troy H. Jones and Arthur E. Mitchell. J. C. McDaniel, horticulturist for the state department of agriculture, represented Tennessee Horticulture and the Tennessee Peach Council.

Pomologist John H. Weinberger showed the visiting nurserymen and horticulturists the results of years of painstaking work at the laboratory in breeding better peaches for the southeastern states. In the Barrett orchards near by, the recently introduced Dixigem peach made an impressive showing in a young commercial planting.

Another peach selection, FV 4-155, showed good characteristics for a commercial shipping variety. Dr. Weinberger announced later (June 24) that the United States Department of Agriculture had released it for commercial propagation this summer. "A limited quantity of budwood is available from bearing trees of FV 4-155," said Dr. Weinberger, "and more from nonbearing trees. By next season there should be enough budwood available to take care of all needs."

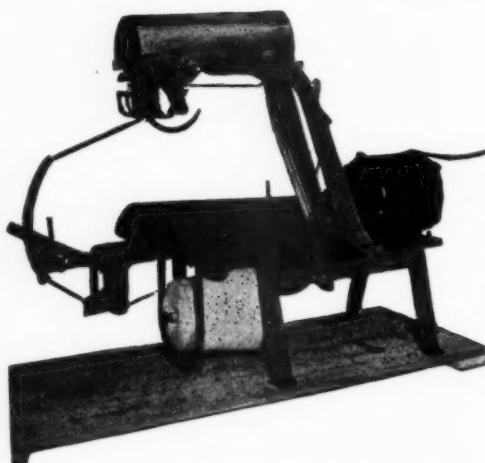
FV 4-155 is a seedling of Halehaven (selfed), with a fruit having many Elberta characteristics in flesh and appearance, but without the slightly bitter flavor of Elberta. It is a large yellow freestone, ripe with the Hiley or a day or two earlier at Fort Valley. The trees are usually vigorous and are resistant to prolonged dormancy, an important factor in the warmer peach districts.

J. C. McDaniel.

C. H. SELBIG is establishing Selbig's Evergreen Nursery, at Owosso, Mich. He recently purchased one-half acre of stock from Grimley's Nursery, which is going out of business.



with **FELINS ELECTRIC BUNCH TYER**  
FOR — BUNCH VEGETABLES, CUT FLOWERS, NURSERY STOCK



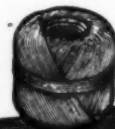
### NEW FELINS ELECTRIC BUNCH TYER

Geared to make approximately 66 ties per minute — double the speed of previous model.

**FELINS** · Milwaukee 6, Wis.

*Here's our problem... What do you recommend?*

Before the war disrupted supplies of Nursery Twines, such inquiries were meat and drink to us. Too often during the war years it has not been possible to make either an intelligent recommendation or any kind of delivery. \* Now that supplies are again becoming available, it will be a pleasure to recommend and supply the Twines required for the needs of the greatly expanded postwar Nursery Industry.



"SINCE 1840"

### HORTICULTURAL REALTY CO.

135-39 Northern Blvd. FLUSHING, L. I., N. Y.

Realtors to the Floral Trade

**GREENHOUSE PROPERTIES  
FLOWER SHOPS, NURSERIES**

List your property with us  
for prompt results.

### DOWAX

★ Extends transplanting season

★ Reduces losses



**Dow**

AGRICULTURAL CHEMICALS DIVISION  
THE DOW CHEMICAL COMPANY  
MIDLAND, MICHIGAN

# INSURE YOUR PLANTINGS



## AGRICO FOR LAWNS, TREES & SHRUBS

Contains all needed plant foods in just right proportions to stimulate season-long growth of greener lawns, healthier trees and shrubs. In 100, 50, 25, 10, 5 lb. bags.

## AGRICO FOR GARDENS

Specially formulated for greater abundance of flowers, more bloom and color—better vegetables, richer in minerals and vitamins. In 100, 50, 25, 10, 5 lb. bags.

## AGRICO FOR BROAD-LEAF EVERGREENS

Prepared expressly to feed Rhododendrons, Azaleas and other acid-loving plants—also builds up soil's acidity, essential for these plants. In 100 and 10 lb. bags.

## SELL AGRICO TO YOUR TRADE

Feed your plantings with Agrico to insure utmost health and vigor. Sell Agrico to your trade—they'll get better results, and profits on Agrico sales will pay your own fertilizer cost and show you a nice profit besides.

These *three* Special-Purpose Agrico Fertilizers go further, do a better job . . . more plant-feeding value per pound and per dollar. Order Agrico now—we furnish liberal supply of colorful booklets, display material, newspaper cuts, etc., to help you boost sales and profits. Write us today.

**ORDER AGRICO NOW!**

Order Agrico from nearest A. A. C. Sales Office, or write to

**The AMERICAN AGRICULTURAL CHEMICAL Co.**  
50 CHURCH STREET, NEW YORK 7, N. Y.

## SPRAYING WITH 2,4-D.

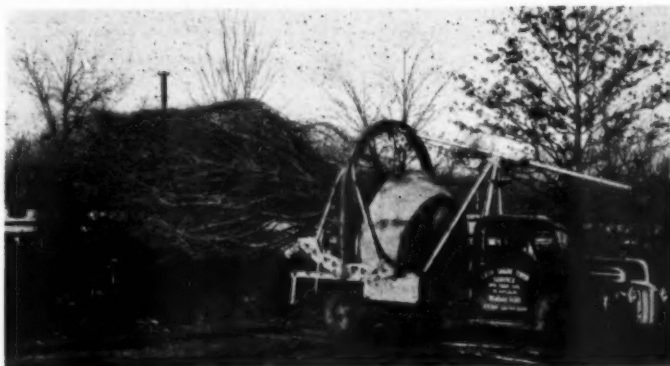
Do not use a 2,4-D spray on anything but lawns and weeds and do not use the same sprayer for applying other sprays, caution A. M. S. Pridham and J. F. Cornman in Cornell University extension bulletin 698, for May.

2,4-D is injurious to almost all broad-leaved plants, leaving only grasses unharmed; so the solution should never be applied when the air movement will cause it to drift to adjacent plantings.

Because there is no practical way at present to wash 2,4-D out of a sprayer, the same spray that contains this weed killer must not be used to spray other materials either on flowers, vegetables, shrubs or trees. For this reason it is usually desirable that inexpensive equipment be used for small-scale sprayings. The bucket or suction pumps that deliver a coarse spray are satisfactory for lawn areas of about 1,000 square feet. On large areas where special spray equipment is not feasible, a device known as a proportioner can be attached to the outlet of the garden hose to apply 2,4-D.

For best results it is necessary that manufacturer's specific instructions for preparing the solution and for the

## AUTOMOTIVE TREE MOVERS



The above is a picture of one of our 7-foot Rocker Type Tree Movers, owned and operated by the Laur Shade Tree Service, St. Louis, Mo. The tree is a large sugar maple weighing slightly more than five tons. This is the third mover purchased from us by this company.

On short hauls it is possible to move five or six big trees within a day's time. We can use this mover as a crane to load trailers or other trucks for longer hauls.

Place your order early to make sure of Fall delivery due to a scarcity of materials. Write for further information.

## WILLIAMS & HARVEY NURSERIES

Box 7068, Country Club Station

Kansas City 2, Mo.

rate and method of application be followed closely. And while a single application of this formula kills most lawn weeds, if a fertilizer is applied at the same time, the weed-killing operation will be considerably speeded up. A 5-10-5 fertilizer or a nitrogenous fertilizer in appropriate amounts is effective on 1,000 square feet of turf.

#### ILLINOIS DIRECTORS MEET.

Members of the Illinois chapter of the American Association of Nurserymen spent several hours inspecting the extensive evergreen plantings of the D. Hill Nursery Co., at Dundee, June 28, preceding a joint meeting with the board of directors of the Illinois State Nurserymen's Association. Eighteen nurserymen representing fourteen establishments toured the grounds and visited the newly rebuilt office. The modern office rooms, beautifully paneled in selected woods, are efficiently planned and organized.

Luncheon was served and the joint meeting held at Crystal Lake. The meeting of the board of directors was short and covered only routine business, according to Secretary Miles W. Bryant, of Princeton. At the chapter meeting A. A. N. President A. H. Hill, recently returned from a visit to the Washington office, discussed a number of matters which will come before the board of governors of the A. A. N. when it meets July 16 at Miami Beach. Action was taken to instruct the delegates from the Illinois chapter to support the proposal of the executive committee in regard to a raise in salary for the executive secretary.

The next meeting of the board of directors will be held August 9 at the office of Palmgren's Nurseries, Glenview, at the invitation of Elmer Palmgren, president of the Illinois State Nurserymen's Association. An inspection trip will be made through the grounds of this firm and of several others in the vicinity, including the Golf Nurseries and Simonsen's Nurseries.

BECAUSE of the recurrence of a disability incurred in military service, O. H. Stotkoe, who operated the Stotkoe Nursery, at St. Louis, Mo., is moving to Bayfield, Wis., where he will start a nursery and orchard.

BLACKWELL NURSERIES, Semmes, Ala., have purchased the nurseries of the Haven Floral Co., Route 2, Box 418, Winter Haven, Fla. The establishment will henceforth be known as Winter Nurseries, Inc.

## For Healthier Plants, Fuller Foliage, Blooms and Berries



Use

Don't  
Gamble On  
The Weather

### ATLAS PORTABLE OVERHEAD IRRIGATION

To insure healthier plants, normal even growth, reaching marketable size earlier, American nurserymen are installing Atlas Portable Overhead Irrigation Systems. Atlas pipe is equipped with the flexible, leakproof, Horseshoe Latch Couplings. Its light weight, quick assembly and easy portability make it ideal, inexpensive and profitable.

Write for literature and prices. Attractive territories open for dealers.

Manufactured and Distributed by

### ATLAS SUPPLY DIVISION

Jones & Laughlin Supply Company

425 North Main Street

Muskogee, Oklahoma

## HYPONEX PLANT FOOD

### CLEAN—ODORLESS—SOLUBLE—POWDER

USE HYPONEX to grow bigger and better flowers and vegetables in poorest soil—even in sand, cinders or water. Excellent fertilizer for trees, shrubs, lawns and houseplants.

USE HYPONEX for top dressing, seedlings, cuttings and transplants. Produce strong root systems and stems, also more and larger flowers and fruit.

SELL HYPONEX to your customers. Nationally advertised.

1 oz. packet... 10c.—packed 72 to case—wt. 7 lbs.  
3 oz. can... 25c.—packed 36 to case—wt. 12 lbs.  
7 oz. can... 50c.—packed 24 to case—wt. 14 lbs.  
1 lb. can... \$1.00—packed 12 to case—wt. 16 lbs.  
10 lb. drum \$8—25 lbs. \$15—50 lbs. \$25—100 lbs. \$40  
Commercial growers and dealers receive 33-1/3% discount from the above retail prices.

BUY HYPONEX from your jobber or send \$1 for 1 lb. (makes 100 gallons). \$1 credited on first order for 1 drum or case.

HYDROPONIC CHEMICAL COMPANY, Inc.  
315 West 39th Street, New York 18, N. Y.

## WOOD LABELS

For Nurserymen

### DAYTON FRUIT TREE LABEL CO.

Ray and Kiser Sts. DAYTON, O.

### PRONOUNCING DICTIONARY of Plant Names

64 pages, 3000 names, 25¢ per copy  
American Nurseryman Chicago

## IRRIGATION

PIPE — PUMPS

FITTINGS — VALVES

ENGINES — SPRINKLERS

ENGINEERING SERVICE



R. O. BOX 3749-PHONE 6118-630 W. CHURCH ST.

**MARK YOUR PACKAGES WITH THIS STAMP**

*Clearly Quickly*

This stamp has interchangeable type to change the size, grade and brand in a second. IT SPEEDS YOUR MARKING 200%. Can be made to meet requirements of every state. Write for prices and folder.

MASSACHUSETTS  
MIN. SIZE 2 1/2" FANCY  
Mass. Approved-Crate  
GREENINGS  
PACKED BY  
R. D. MARCH  
Shelburne Falls, Mass.

**RIVET-O MFG. CO.**  
78 Orchard St., Orange, Mass.



# A Complete Line of ROTARY TILLAGE EQUIPMENT!

*Ariens Tiller*



Ariens-Tiller is the perfect all-purpose tilling and cultivating combine for the nurseryman. It harrows as it discs as it plows. ONE operation produces a properly prepared, pulverized and level seedbed, the pulverized soil being thoroughly aerated, shredded and evenly mixed. Its use increases plant yield with less manpower. No large soil chunks to retard plant growth. It also destroys insect life. Ariens-Tiller can be operated in wet or dry

seasons and handles easily in small spaces—3 models to meet your requirements. Complete details and name of distributor upon request.



*Tractor Tiller*



ARIENS TRACTORTILLER does a complete job of fitting the soil in ONE operation—it harrows, discs, levels and packs the soil. Motor drive or power take-off from suitable tractor. Depth of operation down to 12 ins. Made standard in 2 sizes—4 ft. and 5 ft. Complete catalog and name of nearest distributor upon request.

**ARIENS Company**  
BRILLION • WISCONSIN

## McFARLAND

## ADVERTISING SERVICE

MAGAZINE ADVERTISING  
NEWSPAPER ADVERTISING  
POSTCARDS  
CATALOGS  
FOLDERS  
LABELS  
TAGS

BOX 675, HARRISBURG, PENNA.

### NOTES FROM A NURSERYMAN'S WIFE

With daylight saving time making us conscious of time zones, it is interesting to speculate on what may be called "growth zones." Why is it that hard maples grow native on the hills only thirty miles away, for instance, while here they are difficult to start and to keep growing? Nature seems to draw invisible boundaries which the plants understand, if we do not.

We recall seeing a sickly little tree among all the lush growth of a park at New Orleans. It was labeled "American Elm," and while it had probably done well to grow at all in the company of palm and camphor trees, it bore faint resemblance to the noble elm of the north.

However, man has been able to make some things jump these lines with impunity. Would anyone imagine that the cypress of the southern swamps could possibly grow in a prairie state, for instance? Yet a row of these same swamp-loving cypresses has not only grown but has flourished through dry summers and cold winters at Lawrence, Kan. These dry-land cypresses grow without knees, but the astonishing thing is that they grow at all in what would seem to be a wholly alien environment.

\* \* \*

We should think that a nurseryman, or anyone who works with soil, would enjoy Louis Bromfield's "Pleasant Valley." His chapters on "Johnny Appleseed" and "My Ninety Acres" appealed to us especially, but the whole book, with its accent on saving and rebuilding precious soil, was positive and encouraging. More of us might live on the land if we, like Mr. Bromfield, could write a book or sell a story to Hollywood for a fancy sum with which to begin!

\* \* \*

The head of the house likes to plant, but hates to prune, and grieves even when we cut off the new shoots of the beautybush which completely screen the north window, or if we hack off a bush honeysuckle which is all out of bounds in a border.

\* \* \*

According to our daughter's Spanish textbook, "Ciudad Trujillo," the Dominican Republic, had, until a short time ago, a tree growing close to the sea which had served as a hitching post for Columbus' ships. When the street was paved a few

## Beets' Dee TREE SHAPER

A guiding tool to shape Evergreens up to 10 ft. tall perfectly in 8 to 12 minutes. Hedges and other shrubbery trimmed with equal speed. Adjustable any size any shape.

**A PERFECT TOOL FOR A PERFECT JOB.**

All steel, chromium plated.  
Folds into a compact unit.  
Weight 6 lbs. Life time guarantee. Available now. \$15 prepaid anywhere in U. S. A.



**BEETS-INC.**  
P. O. BOX 997, DEPT. Z, LANSING 4, MICHIGAN

### Tree Wound Dressing

Arborist Tree Wound Dressing is a scientifically prepared waterproof composition for application to tree cavities, wounds or other exposed wood of trees. It contains no coal tar, carbolineum, creosote, nor any material injurious to the cambium layer or the life of the tree.

Arborist Tree Wound Dressing possesses antiseptic and fungicidal properties, being waterproof, adhesive and elastic, giving a durable tree wound dressing which will not harm the living tissue.

	Per gal.
1 gal. can (6 in case).....	\$1.00
30 and 50-gal. drums.....	.75

**ARBORIST SUPPLY CO., INC.**

Dept. A. N. I

Rye, N. Y.



### Build Your Own Irrigation System

Using the nozzle that gives adequate irrigation on low operating cost. Covers 40-foot circle on 15 lbs. pressure. Complete even coverage improves yields and quality of crops.

*Plan and instructions sent upon request.*

**ITTNER BROS.**

Anoka  
Minnesota

### IT COSTS NO MORE (and in most instances less) FOR OUR PACKING OF Nursery Burlap Squares and Rolls

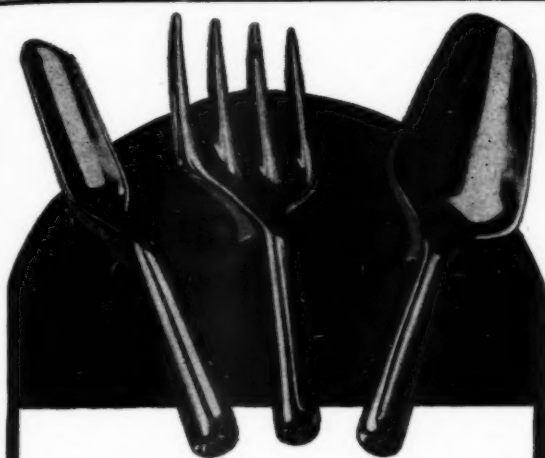
Write for prices and samples.

**L. ATKIN'S SONS**

P. O. Box 167 Rochester, N.Y.

### LABELS FOR NURSERYMEN

**THE  
BENJAMIN CHASE  
COMPANY**  
DERRY, N. H.



# MARKLE ALUMINUM



## GARDEN TOOLS

**Wholesaler and Dealer  
Inquiries Invited**

## The Best Tools Made for Nurserymen and Growers!

Sturdy, scientifically balanced 1-piece aluminum tools will last a lifetime. Revolutionary patented finger rest eliminates much of the effort consumed in using ordinary hand garden tools. Used and endorsed by leading growers, nurserymen and seedsmen. They say they're the finest tools they've ever used!

## USE THEM YOURSELF—RESELL FOR QUICK, LIBERAL PROFITS!

Set consists of 1 standard trowel, 1 transplanting (or bulb) trowel and 1 cultivating fork. Sets are packed in attractive boxes suitable for shipping. Each tool can also be purchased separately, and comes in an attractive shipping package.

Order at once from your wholesaler or supply house, or direct from us. You and your customers will be delighted. Immediate delivery.

**MARKLE FEATHERLITE PRODUCTS CORP.  
ROCHESTER, MICHIGAN**

years ago the tree died, but today an identical tree made of cement is seen in its place.

\* \* \*

Dr. N. E. Hansen, of Brookings, S. D., better known as "the Burbank of the plains," is still working on things that look as though they could not be done. In fifty-four years of research and study he has done an incalculable service for agriculture of the plains states. He has worked in a broad horticultural field, including grasses, cereals and fruits, discovering, importing and developing varieties which were suited to dry-land conditions. Now his ambition is to perfect a rose without thorns. He may do it, at that.

\* \* \*

Generalissimo Stalin has had a tulip named for him, the Joseph Stalin. Bright red, of course.

\* \* \*

Another statement struck us in the above-cited item. Four Dutch bulb experts developed the Joseph Stalin tulip, and gave it and 30,000 others to the city of Moscow for May day. We have to hand it to these bulb growers, who a few months ago were all but starving under the heel of the conqueror. In spite of having to use bulbs for food during their hungry days, they developed new varieties



Pat. No. 110110

**\$35.00**

F.O.B. K. C. Kansas

## NURSERY HAND TRUCK

Material shortages still limit production. We are grateful for the understanding patience of our many good customers who accepted delayed delivery this Spring. We are continuing to ship as quickly as we can, filling orders in the same order we receive them. We suggest that you order now for your Fall season needs.

### SPECIFICATIONS

Equipped with Jumbo Balloon Tires and Tubes, 12x4 inches.  
Specially Designed Curved Nose.  
All-steel Construction, electrically welded.  
Weight 55 pounds.  
Over-all Length 63 inches.  
Over-all Width 27 1/2 inches.  
Capacity 25-in. Ball weighing 600 pounds.

**THE GARDEN SHOP, Inc.**

4819 Mission Rd.

Kansas City 3, Kan.

**RUBBER Products**  
AMERICA'S FINEST  
KATFISH BRAND  
Rubber Bands  
Springs  
Sanding Strips  
Coilings  
Spray Bulbs  
Kneading Pads  
Footwear  
Gloves  
Sprayer Bulbs  
Belts  
Hoses  
\* GET OUR CATALOG AND PRICE SHEET  
BROADWAY RUBBER MFG. CO. LOUISVILLE 2, KY.

**BAMBOO CANES  
RAFFIA — BULBS**

**McHUTCHISON & CO.**  
95 Chambers St. New York 7, N. Y.



and propagated enough so that when liberation came they could again travel over the temperate zone selling their bulbs, developing new markets, being, in short, astute businessmen.

\* \* \*

April 9 the faculty of Pittsburg Teacher's College, Pittsburg, Kan., distributes apples to its students. In 1907 a lobby was persistent in importuning the Kansas legislature to pass the bill authorizing the establishment of the college. The bill was passed, but the harassed lawmakers fined the lobby a barrel of apples. The first students in turn fined the faculty a barrel of apples, and since then every student has eaten an apple at the expense of the faculty on Commemoration day.

\* \* \*

Treeless Iceland is planning a large-scale planting of spruces from Alaska, which have been found suitable to the climate. Reindeer have been sent from east to west; now spruces are going from west to east, with benefit to all concerned.

\* \* \*

Bananas are a little more numerous than they were, although they still do a lightning disappearing act from grocery counters. They are one of the oldest foods known to man, we are told. Alexander the Great found the fruit growing in the valley of the Indus in southern Asia. From Asia it spread to Africa, and from Africa to the Americas, especially to the banana republics south of the border.

\* \* \*

A bulletin from the Arnold Arboretum gives us information on plants and the men whose names they commemorate. "Every stamp has a story," philatelists tell us. Every plant has a story, too, some familiar, some not.

If you read Parkman's "Oregon Trail" in your schooldays, it is interesting to note that Malus halliana parkmani, Hall's flowering apple or the Parkman crab, was named for that frail and afflicted author and for Dr. George Hall, who sent a plant of the Japanese crab from Japan in 1863, which was planted in Parkman's garden at Jamaica Plain, Mass.

Mahonia was named for Bernard McMahon (1775-1816), a prominent American horticulturist.

Wistaria owes its name to Caspar Wistar (1761-1818), a professor of anatomy at the University of Pennsylvania.

Weigela was named for Christian Ehrenfried von Weigel, a German physician and naturalist (1748-1831).

Spiraea thunbergii is one of many

## NEW PROFITS FEEDING TREES WITH THE FERTIGATOR "Wet Method"

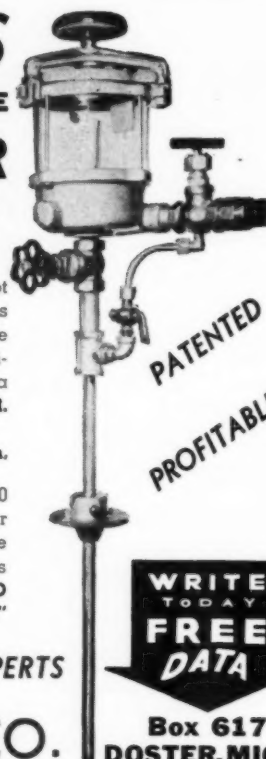
Fertilize, Irrigate and Aerate tree root systems in one simple operation. Uses any standard soluble or nonsoluble tree food. Operates effectively on ordinary city water pressure. You can do a **BETTER** job **FASTER** with **FERTIGATOR**.

R. R. Cunningham, Dallas Tree Man, says:

"... I have put down more than 100 pounds of fertilizer in a single hour ... I'm more than satisfied with the ease and speed of operation, results and extra PROFITS ... send **TWO MORE FERTIGATORS AT ONCE!**"

APPROVED BY LEADING EXPERTS

**FERTIGATOR CO.**



## CRYSTAL BORER REPELLENT

For most species of borers on deciduous trees. Apply as protective measure before adult moth lays eggs. Used by leading tree companies.

### LIQUID TREE WAX

A scientific wax emulsion. Can be applied with spray equipment. For use on many varieties of transplants to reduce mortality. Retards and reduces loss of moisture. Permits transplanting out of season.



### INSECTICIDE SOAP SPREADER

Stretch your Nicotine supply by using this spreader. Makes most scale, aphid and lace bug control sprays more efficient. Does not discolor foliage.

**CRYSTAL SOAP & CHEMICAL COMPANY, Inc.**

Write for Free Booklets

6300 State Road, Philadelphia 35, Pa.

Department AN

## SHINGLE TOW

Baled and Loose.

Carload shipments only.

From Wisconsin and Michigan.

### SHAVINGS & SAWDUST CO.

Established 1898

330 S. Wells St., Chicago 6, Ill.

Phone: HARison 3300

## SISAL TWINE


Again Available

Smooth, white and uniform as before. Clipped and polished.

Prompt delivery in all plies, strengths and put-ups.

### BUCKMASTER-GAY, INC.

1412 Throckmorton, FORTH WORTH 2, TEXAS



**RA·PID·GRO**  
*See results IN 24 HOURS*  
**HUSKIER PLANTS... that yield**  
**BIGGER AND BETTER FLOWERS...**  
**FRUITS... VEGETABLES...**

*makes*  
**fibrous roots,**  
**healthy stock.**

**SELL IT TO YOUR CUSTOMERS** — Saves thousands of dollars in replacements. Brings repeat business in both stock and Ra-pid-gro from satisfied customers. A real good-will ambassador.

**FEED IT TO YOUR STOCK** — Feed your stock while it is growing. Produces stock that will live when transplanted. Ra-pid-gro is economical, only twenty pounds to the acre.

**IMMEDIATE RESULTS . . . DOUBLES GROWTH ON BUDS**

**Write for discounts to the trade.**

**RA·PID·GRO Corporation - - Dansville, N. Y.**

plants named in honor of the Swedish botanist, Thunberg.

Spiraea vanhouttei honors the memory of Louis van Houtte, an eminent Belgian horticulturist. When we take that trip to Europe we want to visit the nursery he established at Ghent, called the largest in the world.

Stewartia, also spelled stuartia, was named in honor of John Stuart, third Earl of Bute (1713-1792), who was active in developing Kew Gardens, at London, England.

We wonder if the Marchioness of Bute, who in 1798 introduced dahlias into England from Mexico via Spain, was this man's wife.

\* \* \*

Does every nurseryman's wife wish somewhat wistfully that the peak of her husband's work did not come just at the time when there is most to be done in his own yard?

#### DOUBLE ACTION PLOW.

Pennsylvania farmers are interested in a new kind of plow called by its makers "TNT." This plow was demonstrated at Willow-Brook Farm, Northampton county, Pennsylvania, last November. It was designed to meet a demand for an implement which would go deeper than the ordinary plow and still not turn up the

## NEW—BURLAP—USED

### SEWED BURLAP

### NEW GREEN BURLAP

High Quality — Prompt Delivery.

•

## L. RICHARD & CO.

430 N. Leavitt

Chicago 12, Ill.

Phone: CANal 7671-2-3

#### "GRO-QUICK" ELECTRIC SEED BED HEATER

**BOTTOM HEAT CAN'T BE BEAT**  
 For early plant starting with high germination and fast growth. Invaluable for rooting cuttings. Soil heating cable and thermostat for plant benches and coldframes. Detailed instruction sheet mailed free.  
**GRO-QUICK, 308 W. Huron St., CHICAGO, 18.**  
 Mention The American Nurseryman when you write.




#### HAUCK FLAME GUN KILLS WEEDS



2000°F controlled heat quickly, easily destroys seeds, roots, brush, poison ivy, wild morning glory, Canada thistle, other unwanted growths. Many uses: splitting rocks, burning stumps, sterilizing poultry houses, burning kerosene. Does the work of 4 men. Safe, easy to use. 10 day trial. Satisfaction guaranteed. Free catalog.

**HAUCK MFG. CO.**

131 Tenth St., Brooklyn 15, N. Y.



**ZIP-STAY LABELS**  
**ZIP ON AND STAY PUT**

ATTRACTIVE, DURABLE,  
ECONOMICAL

**STANDARD GRADE**  
Plain: 1,000 \$1.50; 3,000, \$4.00; 5,000 \$6.50; 10,000, \$12.00; 100,000, \$100.00.  
One Line Printed: 3,000, \$5.75; 5,000 \$9.00; 10,000, \$17.00; 100,000, \$150.00.  
Two Line Printed: 3,000, \$6.00; 5,000, \$9.50; 10,000, \$18.00; 100,000, \$170.00.  
**ZIP-STAY Red Labels with "SOLD"**  
in bold black letters: 1,000, \$2.50; 3,000, \$6.50; 5,000, \$10.50.

**HEAVY JUTE FIBER**  
Plain: 1,000 \$1.75; 3,000, \$4.75; 5,000 \$7.00; 10,000, \$13.00; 100,000, \$120.00.  
One Line Printed: 3,000, \$6.35; 5,000, \$9.75; 10,000, \$18.50; 100,000, \$175.00.  
Two Lines Printed: 3,000, \$6.50; 5,000, \$10.50; 10,000, \$19.50; 100,000, \$185.00.  
**ZIP-STAY Color-banded Labels**—For marking lot orders, etc. Same price as one line printed.

25,000 at the 100,000 rate.  
5 per cent off for cash, net 30 days.  
Please send for samples and prices on special printing, inspection tags, letter heads, etc.

**MARKHAM'S OHIO NURSERY**  
1153 East River St. Elyria, Ohio

## HORMO ROOT for CUTTINGS

A new product made up of an efficient root-producing hormone and a fungicide, together with other growth-stimulating agents. Best applied with a duster or mixed with water at the rate of four rounded tablespoons to the quart.

**HORMO ROOT A.**  
For all softwood cuttings. Dusting on seeds before sowing it will give better and quicker germination.  
2 oz., \$1.00; 1/2 lb., \$2.50; 1 lb., \$5.00.

**HORMO ROOT B.**  
For hardwood and difficult-to-root cuttings.  
1/2 lb., \$4.50; 1 lb., \$8.00.  
Duster for applying hormone powders, \$1.65.

**SOMERSET ROSE NURSERY, INC.**  
P. O. Box 608 New Brunswick, N. J.

## LINDIG'S SOIL SHREDDER



New improved model  
Engineered for the perfection of soils.  
Prompt delivery.  
Write for folder and price list.

**Lindig's Mfg. Co.** 1675 W. Carpenter Ave. St. Paul 8, Minn.  
Special equipment built to your specifications.

subsoil. "TNT" is a two-bottom plow consisting of two ordinary plows or bases, while set close behind, two to four inches below and a little to one side, are two smaller plows or bases with no moldboards. Advantages claimed for this implement include better drainage in wet seasons and better capillary action from the subsoil in dry seasons. The first theory was proved correct in 1945, which was a wet season, when several prominent Pennsylvania potato growers tried out the plow. They reported increased yields of fifty to seventy-five bushels per acre over yields in the same fields plowed with conventional plows.

### SOAP SPREADERS.

It can be assumed that users of spray materials have a good knowledge of the general principles governing the use of contact insecticides, i. e., those used for the control of sucking insects, such as aphids, red spider, lace bug on azaleas and rhododendrons, and scale insects.

Nurserymen appreciate the value of spreaders for contact insecticides, particularly soaps, but do they realize that soaps vary in efficiency as well as safety to foliage?

Science has shown that insecticidal poisons, including nicotine and pyrethrum, in spite of their respective high killing powers, often fail to yield satisfactory results. By adding a suitable spreading or penetrating agent, the spray solution is rendered more effective to the extent of better wetting and penetrating the vital organs of the insects.

All soaps do not possess the same value as spreaders. Consider the use of soaps in household practices, for example. The experienced housewife knows that delicate woolen fabrics should be washed in tepid solutions and that only certain soaps are suitable for this purpose. She also knows that household linens and other cotton fabrics are washed more satisfactorily at boiling temperatures. However, she does not ordinarily know that vegetable oil soaps function best under low temperatures and that tallow (animal fat) soaps function best under higher (boiling) temperatures.

From this illustration it can be understood that the same principle applies to the efficiency of soap spreaders and, therefore, a soap spreader should be used that will afford maximum efficiency under normal temperatures (usually cold) of the spray solutions.

Another important point is the variation in water content in commercial soaps. Good grades of powdered laundry soaps contain about eight per

## Protect Your Roses



EVERGREENS  
FLOWERING and  
ORNAMENTAL TREES  
and SHRUBS

**Spray  
with "VOLCK"**

against Red Spiders,  
Mealybugs, Scale  
Insects, White Flies,  
and certain other in-  
sects. Kills both in-  
sects and eggs. Mixes  
with cold water.  
Will not clog spray-  
er nozzle. Sold by  
dealers everywhere.



Manufactured by  
**CALIFORNIA SPRAY-CHEMICAL  
CORP.**  
Richmond, Calif. Elizabeth, N. J.

## VOLCK Oil SPRAY

### ATTENTION NURSERYMEN!



## IMP. SOAP SPRAY

Use 1 part with 25 to 40 parts of water

Ask your nearest seedsmen, or  
write for literature.

THE AMERICAN COLOR AND CHEMICAL CO.  
176 Purchase St. Boston, Mass.


## PLANT-CHEM SALTS

### GROW PLANTS with SOIL or without

The balanced plant food with complete nutrients, all trace elements and plant hormone. Attractive, easy to handle 10c to \$15.00. Top seller . . . Profitable . . . National advertising . . . Immediate delivery . . . write today.

**PLANT-CHEM, INC.**  
1355 Market • San Francisco 3

**Pour it on • Watch 'em Grow!**



## PROLIFEROL

For Treating  
Cuttings  
and Seeds  
Bulbs and Tubers

Scientific Growth Stimulant  
Write for Free Booklet

**SCHUYLKILL CHEMICAL CO.** 2346 Soudley Ave. Philadelphia 27, Pa.



**WEED-KILLER****"Herbicide"**

The scientific way to get rid of undesirable vegetation.  
One application completely kills roots and tops.

No. L-184—1-gal. cans, each.....	\$ 2.00
No. L-195—5-gal. drums, each.....	7.50
No. L-197—30-gal. drums.....	30.00
No. L-198—55-gal. drums.....	44.00

Dilution: 1 to 50 parts of water.

**LABELS and PENCILS****POT LABELS.** Wooden— $\frac{1}{8}$  in. wide.

Size	Pounds per Ctn.	PLAIN	PAINTED
4-in.	3 $\frac{1}{2}$	No. M-110—\$1.90	No. M-116—\$2.35
6-in.	5 $\frac{1}{2}$	No. M-112—2.40	No. M-118—3.10
10-in.	5	No. M-114—2.45	No. M-120—3.15

4 and 6-in.—1000 per carton. 10-in.—500 per carton.

**GARDEN LABELS.**  $\frac{1}{8}$  and 10-in.— $\frac{1}{8}$  in. wide. 12-in.—1  $\frac{1}{4}$  in.

Size	Pounds per Ctn.	PLAIN	PAINTED
4-in.	2 $\frac{1}{2}$	No. M-122—\$1.60	No. M-125—\$1.90
10-in.	4	No. M-123—1.85	No. M-126—2.00
12-in.	2 $\frac{1}{2}$	No. M-124—1.00	No. M-127—1.95

8 and 10-in.—250 per carton. 12-in.—100 per carton.

**TREE LABELS.**—3  $\frac{1}{2}$  ins. long, copper wired.

No. M-128—PLAIN—(Wt. 4 lbs.) carton of 1000.....	\$2.50
No. M-129—PAINTED—(Wt. 4 lbs.) carton of 1000.....	3.25

⚡ All labels sold in full cartons only.

**PENCILS—Weather-proof**

No. M-131—Per dozen.....90c Per gross.....\$9.00

**Schupp Florist Supply Co.**  
1143 Greenleaf Ave. - WILMETTE, ILL.

PHONE, WILMETTE 4040

MENTION THE AMERICAN NURSERYMAN

**NURSERY STAKES GALVANIZED STEEL**

No. 6 Gauge—203-inch.  
Fine grade hard steel.  
Heavily galvanized.

Length	Per 100	Per 1000
No. N-96—3 ft....	\$3.50	\$29.50
No. N-97—4 ft....	4.70	39.00
No. N-98—5 ft....	5.85	48.50
No. N-99—6 ft....	6.95	58.00

Shipped fresh and new from our mill in Indiana. Delivery in 2 to 3 weeks.

**Schupp LIQUID TREE PAINT**

Thin only with Raw Linseed Oil

No. T-693—1-gal. cans...Each	\$ 1.75
No. T-694—5-gal. drums...Each	6.50
No. T-695—30-gal. drums...Each	32.50

**RUBBER-TIRED WHEELBARROW WHEELS**

Standard size 8 x 4:00—Heavy Duty Tires and Tubes.  
Metal Wheels—Roller Bearings—for  $\frac{1}{4}$ -in. axle.....\$11.95

**COTTON TWINE—Many Ends**

Put up on 50-lb. tubes—4-ply. Pull out a hank from the tube, any length strings you desire—SNIP! With shears and you have 50 pieces of string all one length.

Very popular with commercial growers. No. M-5—Per 50-lb. tube (59c lb.).....	\$ 29.50
Special—5 tubes for.....	140.00

**MAGNIFYING GLASSES**

No. N-216—2-lens, each.....	\$1.50
3 choices—5 power, 7 power or 10 power.	
No. N-217—Tripod type—7 $\frac{1}{2}$ power—each.....	.75c

Large clear field—Screws up or down to focus.

⚡ Be sure! Check results of your Insecticides.

**GLASS GRADUATES**

For accurate measurement of your valuable Insecticides.

No. I-150—16-oz. size (1 pint), each.....	\$1.85
3 for.....	5.25



cent water; good grades of flake soaps average twelve per cent; household scrub soaps contain twenty-four to thirty-six per cent, and many of the well known fish oil soaps (liquid form) as high as seventy per cent water.

How then, can the general instructions, "Use four to six pounds of soap to 100 gallons of water," be expected to give satisfactory and uniform results when these important details are not duly considered? You exercise care in diluting nicotine sulphate one to 800 when so recommended. Why not then give this nicotine proper support with a soap spreader made expressly for this purpose?

In addition to the varying water content of soaps, there is also great variation in the jelling properties of soaps made from different basic materials. For example, certain vegetable oil soaps with a soap content of forty per cent will retain their liquid forms, whereas soaps made from certain animal fats will assume a jelly consistency in concentrations as low as three or four per cent soap. Soaps with high jelling properties should not be used as soap spreaders. It should also be remembered that contact sprays containing nicotine and soap are more effective if applied on

**YOU CAN'T BEAT PEAT**

for

- Packing Nursery Stock
- Propagating
- Mulching
- Soil Conditioning

Write or wire for quotation on quality acid or neutral peats, furnished in triple-walled paper bags or burlap bags.

We specialize on bulk carloads to nurserymen.

**ELI COLBY COMPANY,** Hanlontown, Iowa

"COTTONETTE" Nursery Squares  
"GIBRALTAR" Frost Covers  
HORTICULTURAL PEAT MOSS  
RAFFIA for budding, etc.

Write for prices; state requirements.

NEW AMSTERDAM IMPORT CO.

122 Chambers St. New York 7, N. Y.

**AGICIDE INSECTICIDES**

Give Top Protection to your Nursery Stock.

ROTONONE and DDT PRODUCTS  
In Dusts and Sprays.

**AGICIDE LABORATORIES, INC.**  
Racine, Wis.

# Raffia

**Genuine Madagascar  
Eastcoast — Westcoast  
Natural and Colored  
Grass Mats  
For Display Purposes**



**Julius Loewith  
INC.**

*Established 1909*

**120 East 16th St.  
New York 3, N. Y.**

**Cable: "MYOSOTIS"**

**Own a  
SOIL TEST LABORATORY  
Of Your Own**



**\$22.50**

**express paid**

## SUDBURY PORTABLE SOIL TEST LABORATORY

The most valuable piece of equipment you can own, giving you the soil information that you need for efficient production. Widely used by estates, professional growers and government field stations. Will last almost a lifetime with refills. Comes in instrument type, solid mahogany case. No chemistry knowledge required. Complete with instructions and helpful chart. **SEND NO MONEY.** Order C.O.D. \$22.50, plus express charges (or send \$22.50 and we pay express). Money back guarantee.

Dealers Write for Special Offer.

**SUDBURY SOIL TEST LABORATORY**  
935 Lab. Bldg. So. Sudbury, Mass.

**A. M. LEONARD & SON**

Piqua, Ohio

**Tools — Grafting Supplies**

Write for Bulletin.

calm, hot, humid days when evaporation is slowest.

There is at present a critical shortage of nicotine, and there is also no assurance that forthcoming supplies will be adequate to take care of growers' needs.

Nurserymen fortunate enough to have a limited supply on hand can stretch this nicotine by using a suitable soap spread, such as CPO Liquid, which increases the efficiency of nicotine as much as 100 per cent.  
C. C. Gwinner.

## INDIANA STATE NURSERIES.

The forestry division of the Indiana department of commerce will try to expand its production of seedling trees to six million next year, after having increased from 137,000 trees grown in 1926 to more than 4,500,000 in 1946, according to R. F. Wilcox, state forester.

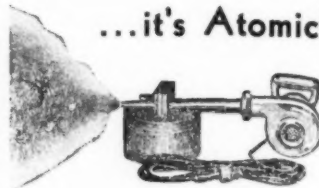
Twenty years ago there was only a small nursery on the Clark state forest, near Henryville. With the addition of two new nurseries, one on the Jackson state forest, near Valonia, and the other on the Jasper-Pulaski games preserve, near Medaryville, the state has a program closer to meeting the increasing needs and interest of tree planters and for planting on state forests.

The Jasper-Pulaski nursery was developed primarily to produce trees for windbreak and reforestation programs in northern Indiana. In the early days the emphasis was placed on the production of hardwood trees for the reforestation of abandoned farm lands, but experience proved the hardwoods unsuitable for such worn-out lands, and so emphasis has been shifted to pines. Black locust is the most prominent species among the hardwoods now grown, and small quantities of tulip polars and black walnut are also grown for planting on smaller areas of better soils.

One of the big production jobs for the state nurseries at the present time is the annual growing of two million or more trees for the coal lands of southwestern Indiana, the biggest single reforestation project in the state.

THE Littlefield-Wyman Nurseries, North Abington, Mass., have sold their carnation houses and will hereafter devote their entire time to the nursery department. Although several of their carnations are on the commercial market, the growing needs of the nursery business necessitated giving up the carnation culture.

...it's Atomic!



## MISTMASTER SPRAYER

**Shoots Insecticides  
up to Twenty Feet!**

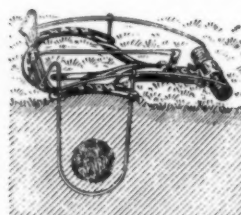
**KILLING** bugs and insects that eat up plants, shrubs and trees—ordinarily a slow, tedious job—is speeded up and done properly with MISTMASTER Electric Insecticide Sprayer. It's motorized! It shoots penetrating liquids thru thick, bushy shrubs or plants—covers wide areas in less time.

MISTMASTER Sprayer sprays any liquid insecticide—and especially DDT. Equipped with a 3/5 to 1 h.p. G.E. universal motor, it has that super-power required for proper shooting of spray. It improves the application of any insecticide, and thus makes it more deadly, 1-gallon spray tank. Weight, 7 to 14 lbs.

Write for details

**Sprayer Corp. of America**  
1812 Winona St., Chicago 40, Ill.

## KILL MOLES



with NASH

## CHOKER LOOP TRAPS

You can help your customers get rid of pesky moles as fast as their runways appear with Nash Choker Loop Mole Traps—the one sure way to get moles in any type of ground—proven by 52 successful years. Harmless to children and pets. Approved by Depts. of Agriculture. Price to nurserymen, \$15.20 per doz., F.O.B. Kalamazoo. Suggested resale price, \$2.00 each, plus postage.

## NASH MOLE TRAPS

164 E. South St., Kalamazoo 5, Mich.

## RUBBER Products

AMERICA'S FINEST

KATFISH BRAND  
Rubber Bands  
Aprons  
Shedding Cloths  
Spray Bulbs  
Kneeling Pads  
Footwear  
Gloves  
Spray Rubber  
Balls  
More

GET OUR CATALOG AND PRICE SHEET  
BROADWAY RUBBER MFG. CO. LOUISVILLE 2, KY.

**WATERPROOF****INSTANT - DRY****• INK •**

**With SPEEDRY  
BRUSH PEN  
and  
SPEEDRY INK**

you can write, mark or stencil on  
wood, paper, cellophane, glass,  
cloth or tin.

Your writing will dry as you  
write and rain or water does  
not touch SPEEDRY INK.

The sensational  
new method for marking

**LABELS  
STAKES  
TAGS**

**Complete Set, \$2.10**

*For the address of your nearest dealer,  
write to the manufacturer*

**SPEEDRY PRODUCTS**

**19 Rector Street,  
New York 6, N. Y.**

#### FELL CITY LANDMARK.

A 132-year-old white ash planted in November, 1830, in Capitol park, Harrisburg, Pa., under the supervision of Gov. George Wolf as part of a tree-planting project to beautify the grounds around the Statehouse, was felled last month.

Deteriorating with age, the tree had lost some of its limbs and was rotting at the crotch, presenting danger of collapse. Alvin Clay, tree surgeon of Wormleysburg, removed the tree as part of a \$6,000 state project for removal of stumps and trees in the park. After the tree was cut down, Col. Henry W. Shoemaker, state archivist, counted the rings, which numbered 132. A newspaper advertisement of 1830 signed by the governor revealed that the state had asked for 100 assorted trees, and other records indicated that the white ash was planted when it was a 15-year-old sapling. At the time of its removal, the ash tree was forty feet in height to its first branch. It measured thirty-six inches across the stock.

E. F. R.

MRS. MARGARET A. LESTER has sold the Netherby Farm Nursery, Doylestown, Pa., and is moving to Wayne, Pa.



**FOR ACID SOIL PLANTS**

**RELIANCE**  
*Azalea and Camellia*  
**SPECIAL**

In appreciation of past favors, we  
extend our Best Wishes for the Future  
to our many friends of The American  
Association of Nurserymen.

**The RELIANCE FERTILIZER CO.**  
**SAVANNAH, GEORGIA**

**RAFFIA**

**MADAGASCAR in A. A.  
West coast and X. X. Superior  
CONGO and CONGO SUPERIOR  
Also  
GOODRICH BUDDING STRIPS**

*Write for prices.*

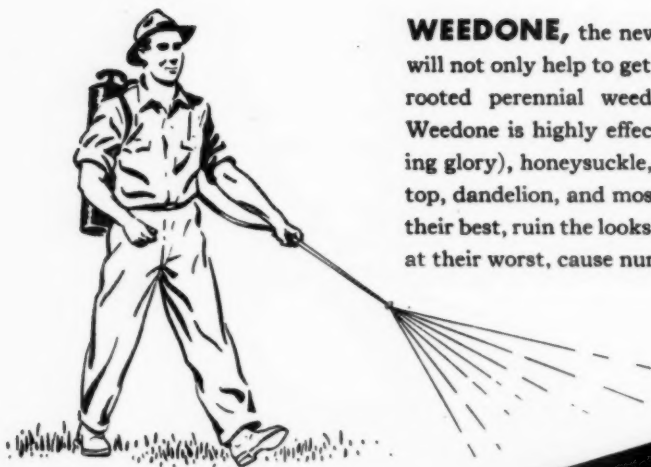
**THOMAS B. MEEHAN CO.**  
**Dresher, Pa.**

**HALPERN BROS.**

**Burlap and Cotton  
NURSERY SQUARES  
all sizes.**

**272 S. 2nd St. Market 3346  
PHILADELPHIA 6, PA.**





**WEEDONE**, the new weed-killer containing 2-4D, will not only help to get you out from under the deep-rooted perennial weeds but also your customers. Weedone is highly effective against bindweed (morning glory), honeysuckle, poison oak, poison ivy, white top, dandelion, and most other noxious weeds that, at their best, ruin the looks of an impressive planting and, at their worst, cause nurserymen serious financial loss.

**WEEDONE**  
TRADE MARK  
will do TWO JOBS for you

**WARNING:** Weedone does not kill grass, *but it kills or injures 'most everything else.* Use it in a greenhouse only when all plants are removed. Use it outdoors near valuable shrubs and trees only on windless days when you can control the drift of the spray.

**SPRAY WEEDONE** when you have an infestation and use Weedone, or recommend it, when your customers' land must be cleared of weeds. Weedone is safe to use around livestock; it does not permanently sterilize the soil; it does not corrode metal spray-equipment; it does not stain or irritate the skin.

**THIS YEAR,** Weedone is available in sufficient quantity. Ask your dealer for the list of susceptible weeds and for instructions regarding dilutions.

**AMERICAN CHEMICAL PAINT COMPANY • AMBLER • PA.**

THE  
WEIG  
BRIST  
RUBY

M

A bett  
tractive  
height of  
wood; no  
from 2 1/2  
Excellent  
superior

Well-bra  
Well-bra

THE NEW  
WEIGELA  
BRISTOL  
RUBY

# Weigela, Bristol Ruby

U. S. Plant Patent No. 492

A better "Eva Rathke" has long been needed—Bristol Ruby is just that. Hardier and more vigorous, it makes a shapely, thrifty plant with attractive rich green foliage. Color is a soft ruby-red shading to garnet-crimson; extremely pleasing in effect and without harsh tone. Attaining a height of 6 to 7 feet at maturity, it makes a perfectly formed, rounded specimen requiring very little pruning because it flowers well from old wood; no die-back or uneven growth at any time. Best indication of its added hardiness is the fact that almost all of our stock has been developed from 2½-inch pots lined out in September here, and with no loss from winter-killing. We doubt if this would be possible with any other Weigela. Excellent reports from Vermont and other difficult regions fully substantiate our own estimate of its unusual hardiness. Bristol Ruby is definitely superior to Eva Rathke in every respect and visitors here at the nursery are quick to note its better qualities.

## PRICES

	Each	3	12	100
Well-branched heavy, 1½-2 ft. ....	\$0.75	\$2.00	\$6.00	\$40.00
Well-branched heavy, 2-3 ft. ....	1.00	2.75	8.50	60.00

Guaranteed

Wayside



Superior Quality

Gardens

MENTOR, OHIO



# **A. B. MORSE COMPANY**

*Modern Salesmaking Horticultural Printing*

. . . . . **ST. JOSEPH - MICHIGAN** . . . . .